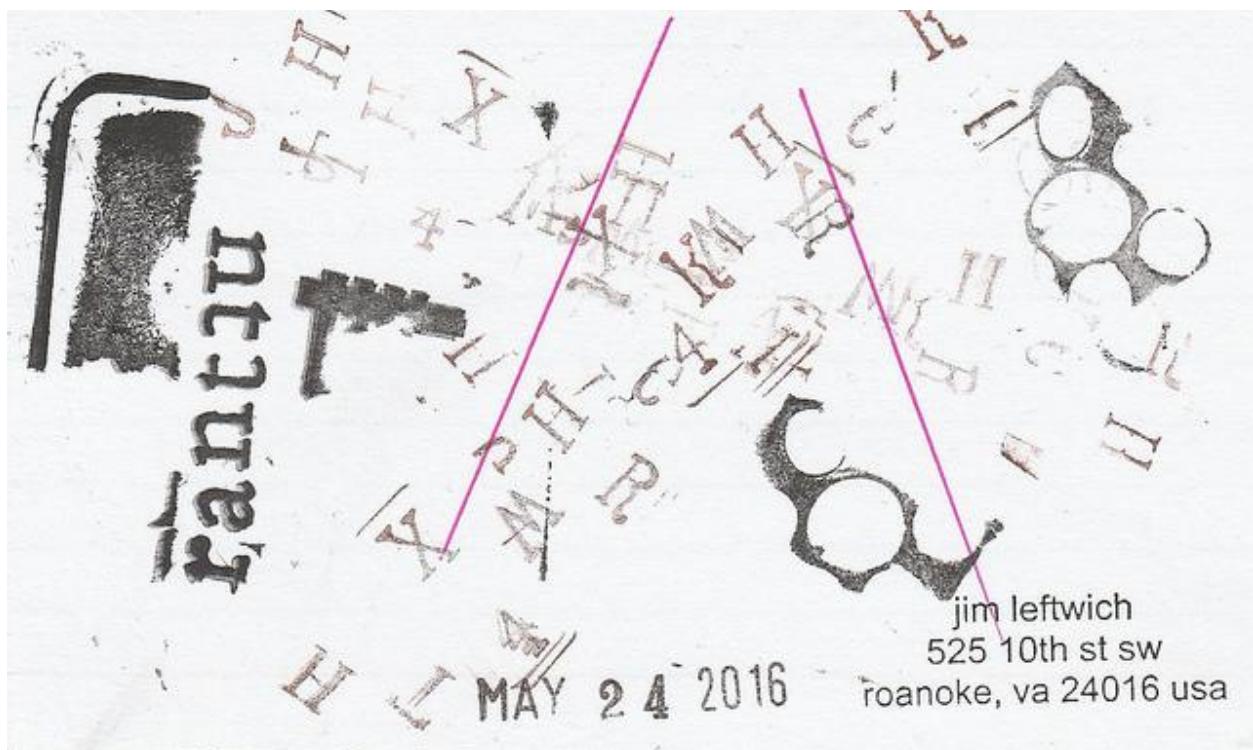


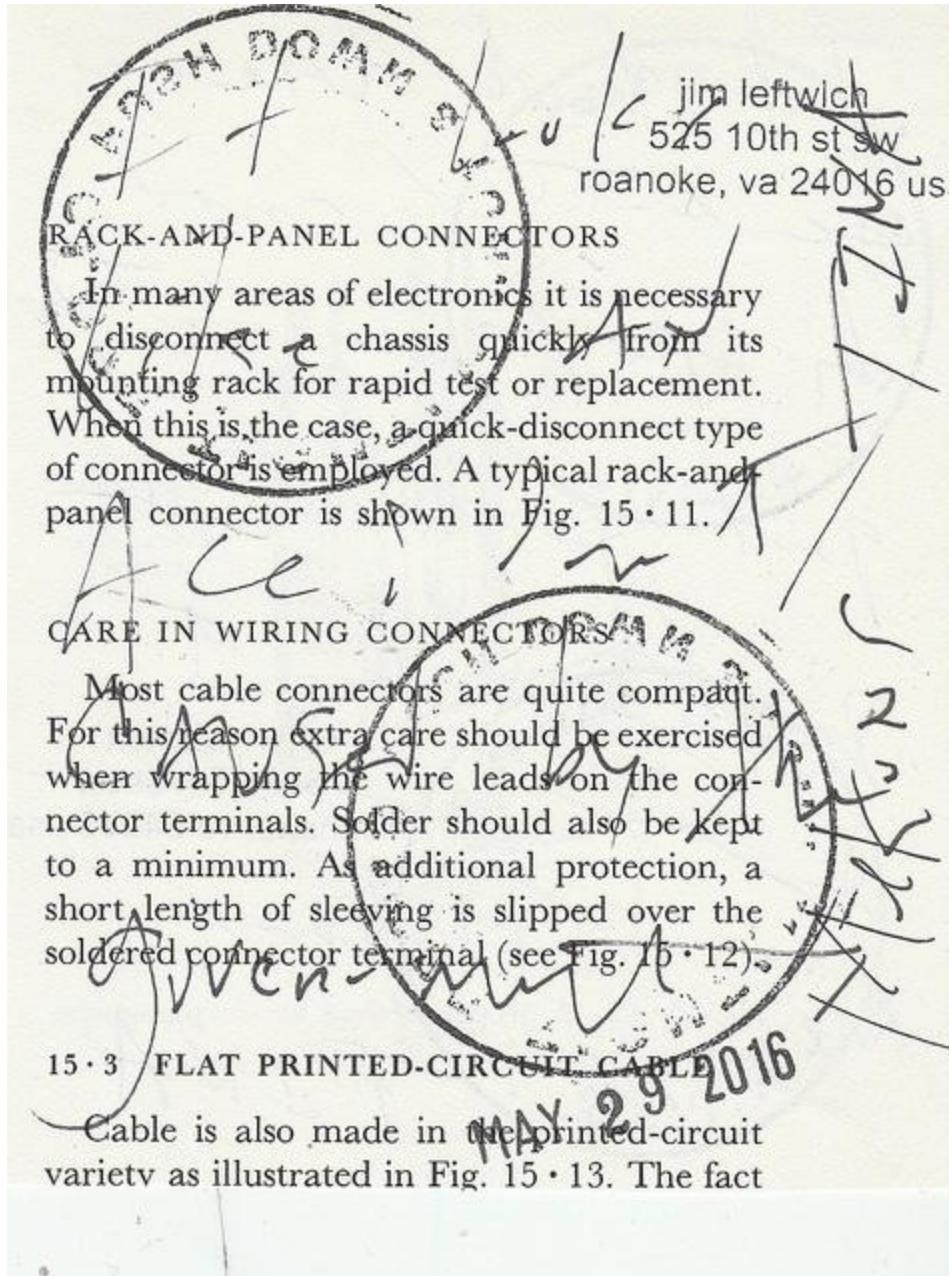
Six Months Aint No Sentence
2016
Jim Leftwich

Book 171



06.08.2016





AND CONNECTORS

jim leftwich

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roanoke, va 24016 usa
Typical symbols used in wiring
diagrams of the five-conductor cable shown
in Fig. 15·14a. Also shown are the symbols

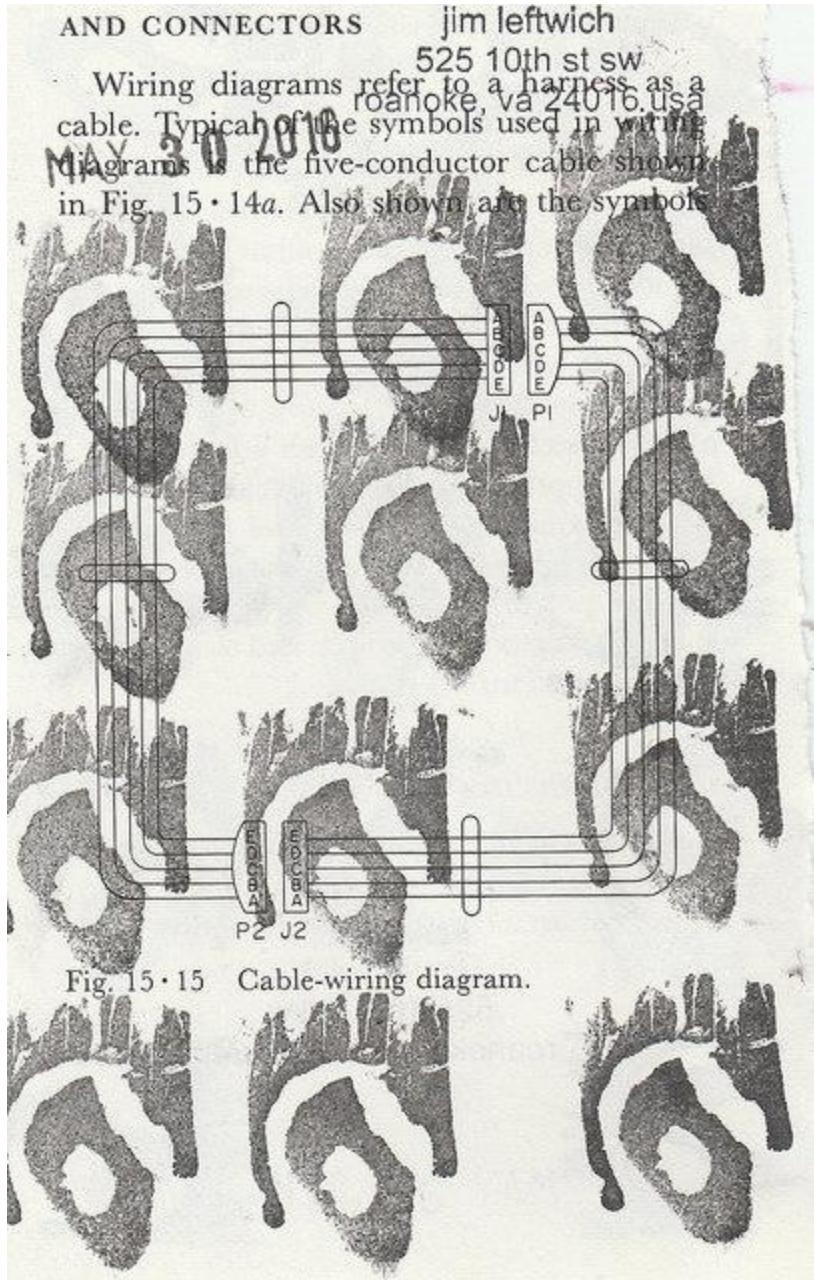


Fig. 15·15 Cable-wiring diagram.

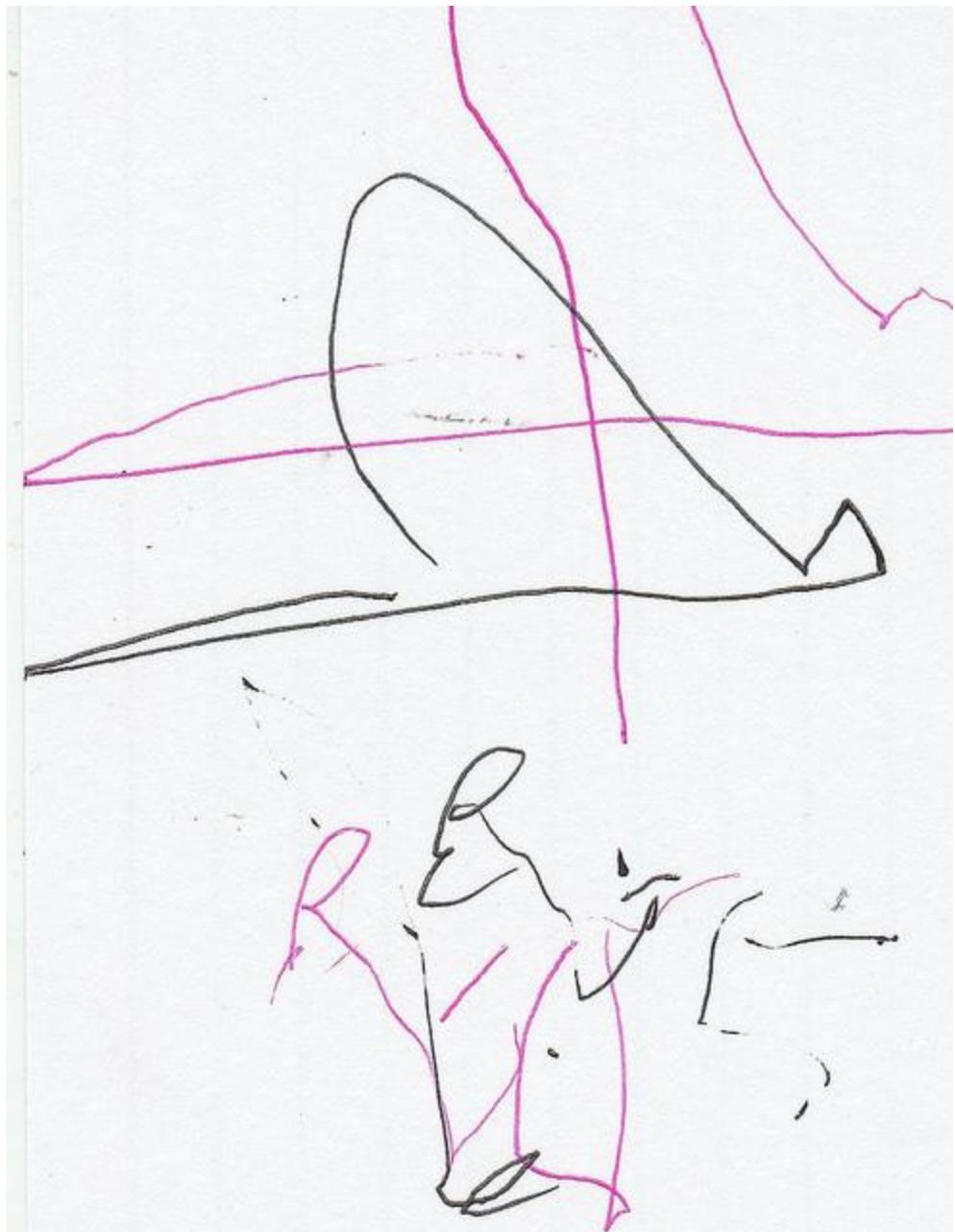
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46

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IN sound

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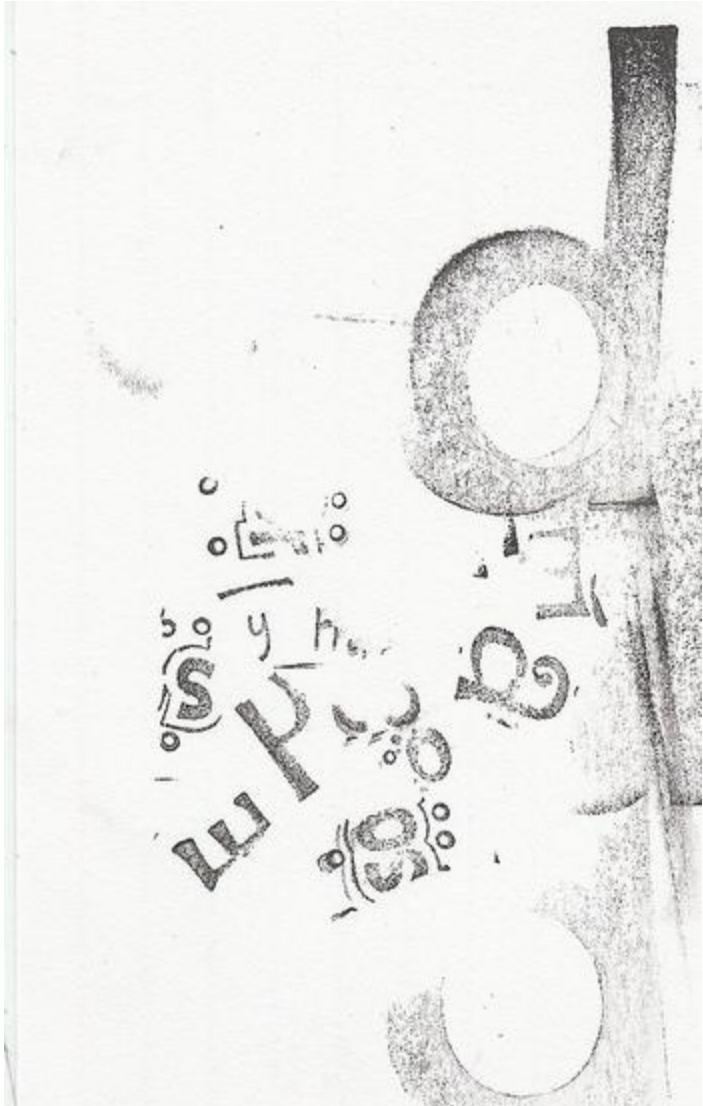
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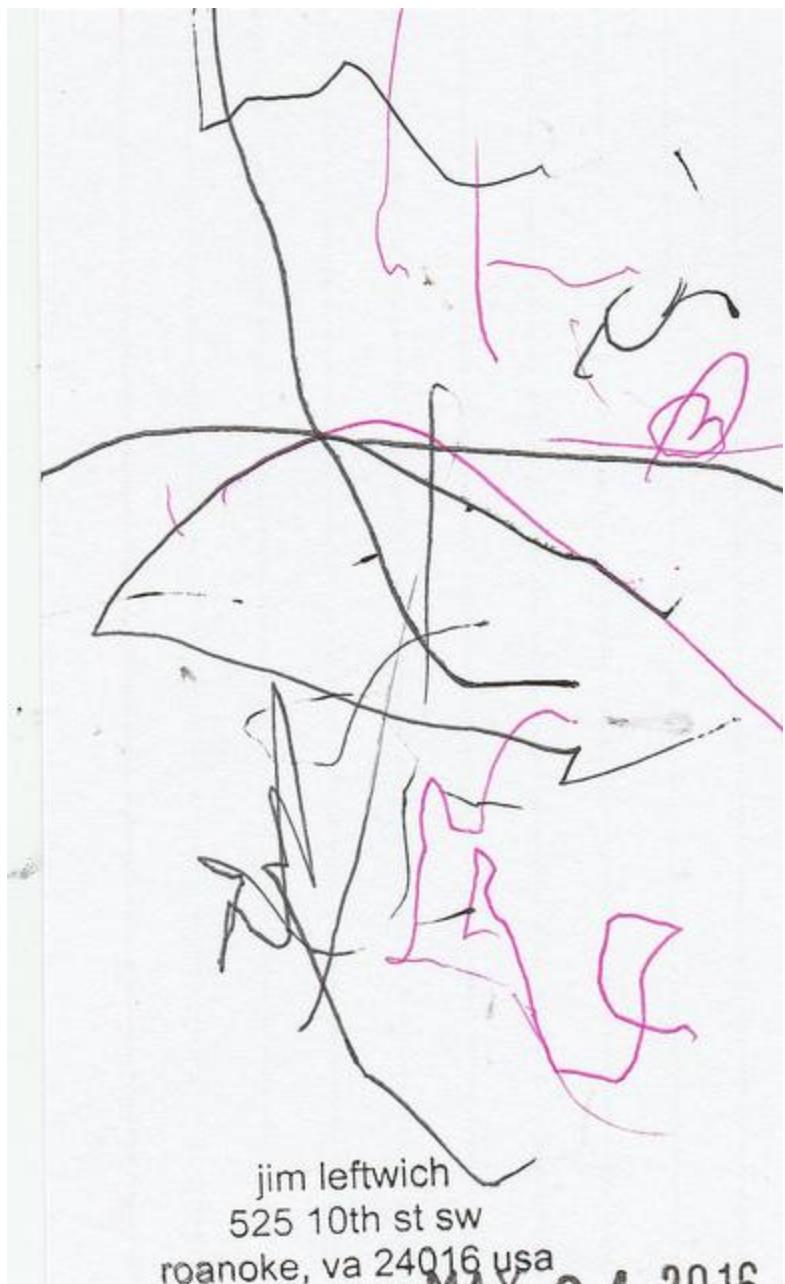
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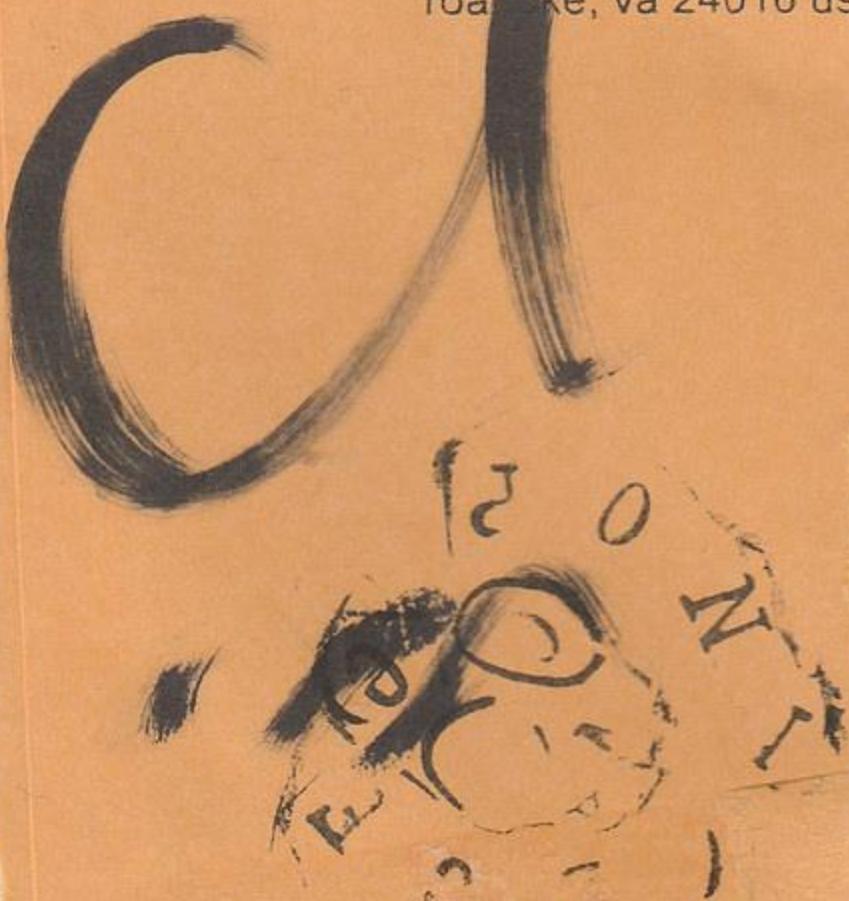
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MAY 27 2016

Avant Garde

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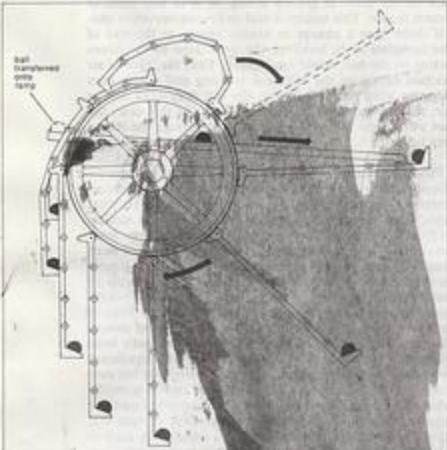


Figure 1: Typical overbalanced wheel (see 1618).

perpetual motion machines based on overbalanced wheels were Edward Somerset, 2nd marquess of Worcester (1619-67), and Johann Ernst Elias Becher (1680-1745), who was generally known as Orllyroes. Each of these men built rather large wheels that were capable of giving impressive demonstrations of apparent perpetual motion due probably to their large inertia which kept them turning for long periods of time once set into motion. Within a few years of 1650-2000, around 1658 or 1659, Somerset operated his device for Charles I and his court. A Dutch physicist, W.J. Gravesande (1688-1742), inspected Orllyroes' last wheel and in many ways was impressed with its construction. In a long and detailed letter to Sir Isaac Newton, he described the externals of the wheel. On grounds that he did not want to reveal the secret of perpetual motion that he had discovered, Orllyroes refused to allow Gravesande to inspect its interior.

Before the end of the 17th century almost every English manor that was situated on a stream, roughly, that is, a third of all the manors in the Domesday Book, had its own water mill to grind flour, saw wood, and full worth more. Villagers and townpeople who had no access to running water naturally sought alternative sources of power. The solution to this problem most commonly suggested was the closed-cycle water mill such as that proposed by

English physician Robert Fludd in 1618 (Figure 2). If the water that turns the mill wheel could be collected from the race at the foot of the wheel and somehow put back into the reservoir above the wheel, the need for a source of running water would disappear. It was reasoned that the wheel could drive a pump that would recycle the mill's water supply. At the time Fludd proposed this device and for more than 200 years after, there was no scientific reason to believe that it would not work; though, of course, all practical efforts failed to achieve perpetual motion by this route. All of the countless closed-cycle mills that have been proposed down through the centuries were supposed to work because their inventors believed that the falling water would give up more energy than was required to return the water to the race above the wheel. Such devices are another variation of the overbalanced wheel and thus constitute perpetual motion machines of the first kind.

John Wilkins, bishop of Chester and an early official of the Royal Society, envisioned in the 1670s three natural power sources that might be harnessed to provide perpetual motion. These three words, were "Chemical Extractions," "Magnetic Virtues," and "the Natural Affection of Gravity." Wilkins' third power-source embraces the entire family of closed-cycle mills. He specifically mentioned only one formula for chemical extraction; its underlying concept may have arisen from a misunderstood observation of the ceaseless motion of small particles visible in a fluid that is known today as Brownian movement. Wilkins also designed, but almost certainly never tried to build, a machine to utilize magnetic attraction. A lodestone on top of a pedestal was supposed to pull a bullet up an inclined ramp where it would fall through a hole and roll back to its starting position. Of course, any magnet strong enough to pull the bullet up the ramp would not let it drop through the hole.

Wilkins' magnetic device was probably the first in a long series of devices designed to use electric or magnetic forces to produce perpetual motion. Machines that have been proposed more recently usually have some mechanical arrangement designed to impose a shield to isolate one portion of the machine temporarily from an existing magnetic or electric field. Invariably inventors of such devices fail to account for the work required to push the isolator through the field and into place in order that isolation may be achieved.

Would-be perpetual-motion-machine inventors have also directed their attention toward machines that would supposedly make use of hydrodynamic and capillary principles. In 1688 the Abbé de la Roque, editor of the *Journal des sçavans*, suggested as a source of perpetual motion the use of a beaker-like vessel that gives its liquid content a large surface area on top and narrows to a small cross section on the bottom. A small tube running from the bottom of the beaker along the outside was permitted to discharge on to the top surface of the liquid in the beaker. De la Roque hoped (in vain) that the water in the wide section at the top would force liquid to flow continually out of the bottom of the beaker and be returned to the top by means of the narrow tube. Sir William Congreve, a member of Parliament in the early 18th century, also proposed to use water to achieve an eternal source of free power. His scheme was based on an inclined plane that had a continuous chain of sponges looped around it; the sponges were forced to pass through a water bath. On top of the sponge chain a heavy weight was fastened. The plan was that as each section of the sponge was filling with water, it would make that section heavier; another portion of the sponges was being squeezed dry by the heavy weight, thus making it lighter. Congreve's idea was that since one section of the sponge chain would be perpetually heavier than the section that was being squeezed dry, the chain would be kept in motion around some appropriately arranged pulleys. The plan obviously failed to allow for the work that would have to be exerted on the sponges to remove the water from them.

Machines that would completely convert heat to work. There is, however, one class of perpetual motion machines that is fundamentally different from the ones just described; they do not violate the first law in that energy in

Use of hydrodynamic and capillary principles

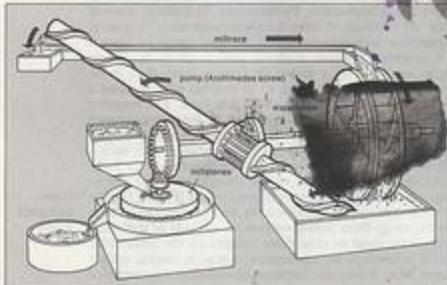
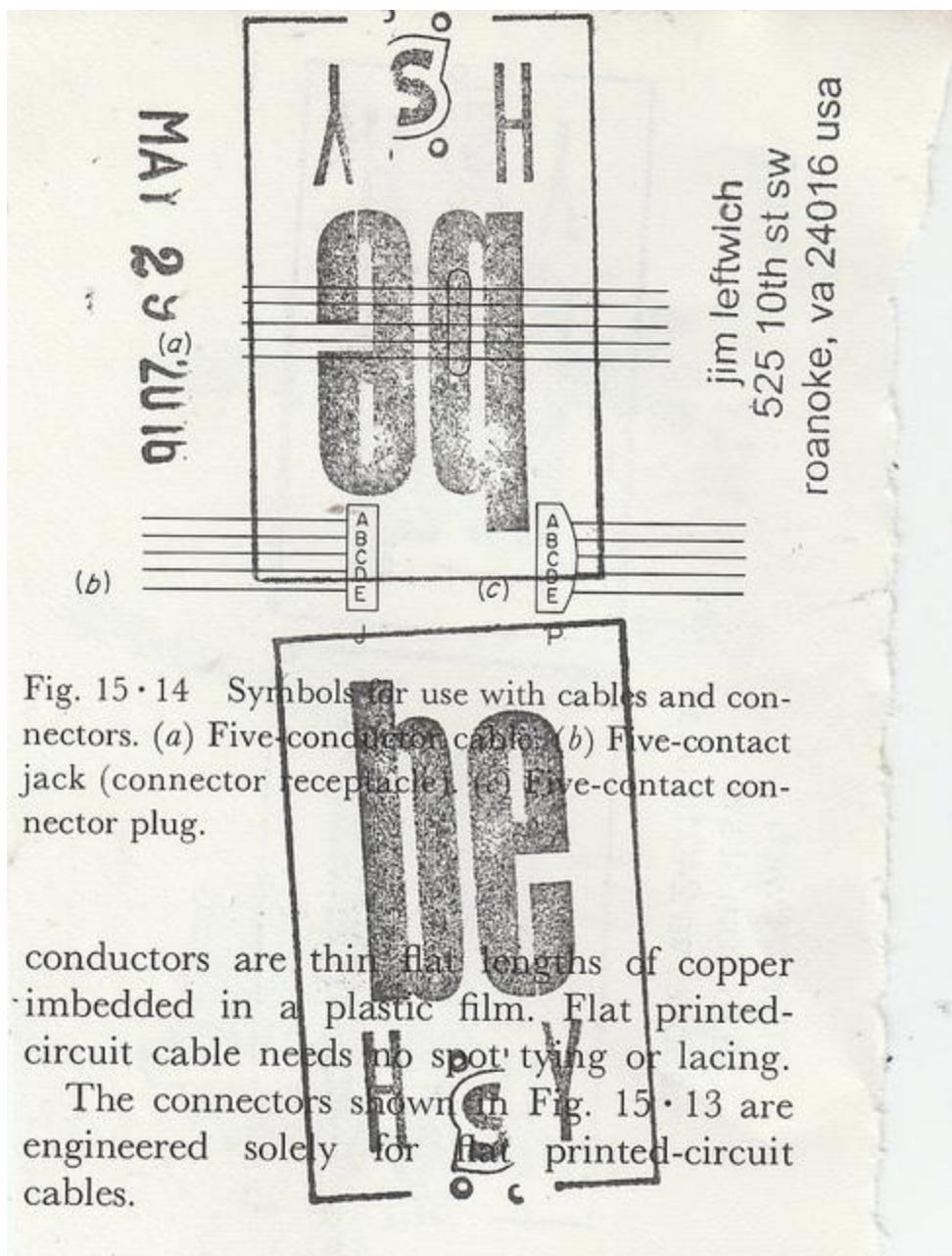


Figure 2: Closed-cycle water mill.



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The Concept of Energy

The concept of energy is most useful in the understanding of the physical world, and at the same time, the concepts of law development in describing the role of energy in use of the material world in the formulation of our understanding.

Energy is used and most simply defined as the ability to do work. This definition is derived from the Greek *energeia*, or "active power." Energy can either be associated with a material body, as in a coiled spring, or a mass, or it can be independent of matter, as in potential energy, or radiation traversing a vacuum. The energy in a system may be more easily amenable for use. The condition where energy is used for work is that the movement is caused by the application of a force. In this case, movement is defined as the product of the applied force (F) times the square of the length (l) it moves. If the force remains constant, greater distance or the action of friction reduces it, so we can also say the time taken to move the mass, the mass times the work done is the power. The energy expended in a process is the work performed in that work, and the total energy of a system, which thermal units, is always zero, except for the case of explosive energy.

Other articles in the Encyclopaedia on the concept of energy include: **MECHANICAL ENERGY**; **NUCLEAR ENERGY**.

This article is divided into the following sections:

- General introduction 440
- The concept of energy conservation 440
- Description of the concept of energy 440
- Forms of energy and transformation 440
- Absolute system 441
- Empirical system 441
- Quantitative and qualitative 441
- Energy in classical mechanics 441
- Energy in relativistic mechanics 441
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- Energy in quantum theory 441
- Energy in classical networks 441
- Energy and statistical and quantum mechanics 445
- Statistical mechanics 445
- Concepts of quantum mechanics 445
- The principle of energy 446
- Equivalent forms of energy 446
- Hamiltonian and Lagrangian formalism 446
- Some speculations on energy 447

GENERAL INTRODUCTION

The concept of energy conservation. A fundamental law that has been observed to hold for all natural phenomena is the law of the conservation of energy, i.e., that the total energy does not change in those many changes that occur in nature. The concept of energy is not a description of any process going on in nature, but rather it is a statement that the quantity called energy remains constant regardless of what is evaluated or when processes—possibly including transformations of energy from one form into another—occur between successive measurements.

The law of conservation of energy is called first and foremost an absolute, but is often called a system, because the nature of *why*. Thus, if one has a system, a boundary is defined to *use* a way that the energy contained within the system does not cross the boundary, then removed from the system, the energy must be conserved within the system. That is, the details of the processes going on inside the system boundaries. A corollary of this concept of energy is that whenever the energy system is observed in an successive set of observations, the total energy difference is a measure of the quantity of energy that has been either added to or removed from the system in the time interval separating the two observations.

Energy can exist in many forms within a system and only be converted from one form to another within the constraint of the conservation law. These different forms include gravitational, thermal, elastic, electromagnetic, radiant, nuclear, and mass energy. It is the universal applicability of the concept of energy, as well as the completeness of the law itself, that cause within different forms, that make it a quantitative and useful.

Development of the concept of energy. The term energy was not used as a measure of the ability to do work until quite late in the development of the science of mechanics. Indeed, the development of classical mechanics may be considered a thousand years, so the concept of energy. The concept of energy, however, does not begin to gain acceptance until the 17th century. It is assumed that when we consider a defined unit of a system, the force applied to the system through the distance through which that force must be applied to effect change. In addition, the work required to obtain even though other factors vary. The second factor, or living force, a quantity closely related to the product of the mass and the square of the velocity, was introduced in the 17th century. In the 18th century, the term energy was applied to the concept of work.

Newton's law of motion recognises force as being associated with the acceleration of a mass. It is almost inevitable that the integrated effect of the force acting on the mass would then be of interest. Of course, there are two kinds of integral of the effect of the force acting on the mass that can be defined. One is the integral of the force acting along the line of action of the force, or the spatial integral of the force; the other is the integral of the force over the time of its action on the mass, or the temporal integral.

Evaluation of the spatial integral leads to a quantity that is now taken as a measure of the change in kinetic energy of the mass resulting from the action of the force and is just the familiar *work*. On the other hand, the temporal integration leads to the evaluation of the change in momentum of the mass resulting from the action of the force. For some time there was debate as to which the integration led to the proper measure of force, the German philosopher Leibniz argued for the spatial integral, while the French philosopher and mathematician René Descartes had defended the temporal integral. Eventually, in the 18th century, the Frenchman D'Alembert of France showed the legitimacy of both approaches to measuring the effect of force acting on a mass, and that the controversy was of no importance.

To recapitulate, force is associated with the acceleration of a mass, velocity, or energy resulting from it. The result of the spatial integration of a force along a line of action is a constant, and energy is a measure of the quantity that is lost. It might be added that power is defined as the rate at which energy is transferred to or from a system, either through work or through transmission lines from the electrical grid to the consumer.

Work, source of energy. An independently recognized basic concept in the science of the 17th century was the concept of work, or force times distance. The assumption of this concept was that it was a useful tool. Further, when close to the surface of a solid, work against the resistance of the surface is found to express itself in the form of heat. This is seen at the contact surfaces of a block sliding on a plate, or the bulk of a fluid in which a paddle is turning or any of the other expressions of "friction." Heat was recognized as a form of energy by the English physicist James Prescott Joule, who also

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MARSHAL 55

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i voted for a woman in the last presidential election.
||||||||||||||||||||||||||||||||

Olga Vladimirovna Rozanova (b. Melenki 1886 - d. Moscow 1918). Although she was mainly a painter, she also developed her activities in the field of design, fashion, book illustration and poetry, and was one of the leading representatives of the new typography. In her artistic life, she participated in the activities of cubo-futurist and suprematist artists. Her poetry is close to zaum language (her husband was Alexei Kruchenykh, creator of zaum), seeking through an "intuitive creation" of the phonetic of different languages, a universal intercommunication between them. In this poem called Spain she takes the sonority of some Spanish words -both real and fictional - and transforms them according to a rhythmic oral cadence, mixing them with other words from Russian: "Antiquary", "Phantom", "Grimaces", "The anthem", "Of death", generating a dramatic and poetic game of tones that portray a place; "the patterns of association are almost entirely paronomastic, and continuity is based on such paronomastic links" (Gerald Janecek).

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Nancy Perloff on Natalia Goncharova
from Mirskontsa (Worldbackwards): Collaborative Book Art and Transrational Sounds
Goncharova's cover designs for Mirskontsa work closely with a concept of book format and production that was most likely developed by Kruchenykh. In 1912, prior to the publication of Mirskontsa, Kruchenykh initiated a collaboration with Goncharova and Larionov on a series of postcards, in which drawings and texts were hand-lithographed on one side, and artist's name, title of drawing, publisher's name (Kruchenykh), and printer's name were typeset on the reverse. Susan Compton argues convincingly that the postcards served as a lead-up to the hand-lithographed books. In his design for Mirskontsa, Kruchenykh pushes the limits of handmade processes. He cultivates a deliberately unrefined and unconventional appearance by choosing a square format, a stapled binding, and cheap, brittle paper with rough edges. The makeshift nature of the binding and the paper captures an aesthetic that Goncharova, as creator of the cover, expresses in each of the 220 collages that she designed for the book. On the Getty copy (see fig. 1), she uses a single sheet of green paper, pastes a cutout in the shape of a flower, and creates a second collage out of a white strip of paper for the title and the authors' names. The lower stem of the flower is partially covered by the white strip, while the three petals on the upper right appear to have originally extended beyond the cover itself but

have since been torn or cut off. Goncharova thus experiments with partial views, equivocal readings, and gestures of incompleteness. Her lettering of the title, МИРСКОНЦА, and the authors' names, А. КРУЧЕНЫХ В. ХЛЕБНИКОВ, mixes print (OH of the title, EH of Kruchenykh, OB of Khlebnikov), with cursive (the "P" in "МИР" and the "Y" in "КРУ"), the latter partially concealing the archaic letterform "E" of "ХЛЕБНИКОВ." The obscuring of visual forms and letters and the general disorderliness of the writing offset the strict alignment of the first initials of first and last names ("A" and "B") and ("K" and "X") and of the hard signs at the end. Highlighted and, in the case of the "K" and "X," made similar in form, these self-sufficient "letters as such" become abstract, independent sounds that anticipate the importance of the phonic dimension in this book. On other copies of Mirskontsa, Goncharova modifies her flower collage. She varies the shape—so that some cutouts bear a closer resemblance to flower forms than others—and she uses a range of colors and materials, from shiny black, glossy or matte green, and marbleized papers, to gold and silver foil with printed patterns. The variants reflect Goncharova's particular fusion of primitivism and the movement toward nonobjective art. Seen one way, the Getty cover (see fig. 1) evokes a human form with splayed legs and arms, or a flower stem tilted at a diagonal so that petals on the left appear closer, and therefore larger, than those on the right. Viewed another way, the collage is a purely abstract form in which edges are partly torn and concealed. Copies at the Museum of Modern Art, New York, similarly oscillate between abstract imagery and stylized cutouts evocative of a human figure, a flower cup with stems and blossom, and a child's toy paper boat (figs. 6, 7).



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Sofia Melnikova's Miscellany

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xylographic

They sometimes appeared in series, which might be regarded as predecessors of the modern comic strip. Cheap and simple books, similar to chapbooks, which mostly consisted of pictures, are called lubok literature.

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masks of the upper pie rats

lyrical alphabets

hand-colored, unadorned

wo ru o detai
surprisingly
while toe peas

the upper
magick
in the
lower
popularity

which were letteral plants

a bumbled clown dawn
eats fan gland
hurt is jam kangaroo
lit moth nor of pool
quite rats song turnip
urn violin whiskey
xylophone yet zinc

a noisic mark marked lunch
unfeeling
ceaselessly connected
to the bridge of threads

spiderwheel to explore the
vacant filament firmament

figment

speeding out of itself
into oceans
of thrown forms

anchors to anvil and axe

let the snake bait thunder

his seed
is the writhing of words

Nina Komarova (Khabias)
strict stick-jetty
little textimagepoems
bees predetermined
meaty beatnik kiosk
xaum 5-snag
magick magazines
semantics of Sakonskaya
in the 1910s
constructed constantly
consciousness
correspo word ero
abandonment authors
malleable maturity
analysis gestural Guro
summer impending angels
electricity withering
wanders

Alex Cigale: Elena Guro (b. 1877-1913) was an early Modernist Russian poet and artist who died at an early age, of leukemia. Her importance to Russian avant-garde poets cannot be overstated. Guro, along with her husband, musician, composer, artist Mikhail Matyushin (who had contributed the music to Kruchenykh's Futurist opera Victory Over the Sun,) was truly an early moving force in the Russian avant garde. As early as 1908, her home was a central meeting place for discussions of art and literature. Her critique of urbanization was to become a major theme for the Russian Futurists, or as they dubbed themselves "BUDETLYANI" (people of the future, something that has been translated as "The Futurians,") who took pains to distinguish themselves from the Italian Futurists and their worship of the machine. The Russian Futurists were, to the contrary, as critical of the city as they were of the bourgeoisie, largely ironic about the machine age; key for them was a revival of folk customs, expressed within the limited vocabulary and means of the naïve and anti-art and, as often with Khlebnikov so always for Guro, imbued everywhere with animistic motifs. Her work was posthumously featured in TROE, the Russian Futurist book dedicated to her memory.

reflected unblinking fails surmounting
empowered relish
mocked peddles the preacher machine
to spurt avenues authority
accepts the scourge and exhalation
engendered in eternal
hours thunder exchanging
streaming eyes automobiles
implore hopeless hats
fringed in the prison dog smell
masking the spells in small nights
possible contine and cocontac
creav th spub constru theorl
good lab at the sea
detuned experiments were
romanticist socks
who openly discussed
the wolfbeats and cheapbooks
on the other side of ritual sickness

the coast is on fire year round

maybe the isthmus
is as much of a gamble
as we can get

a different sunrise everyday
masks the causal lake

spiral soap is
located
in the people
and the landscape

it's simply not what you wanted
that's what you should like about it

we like the nonsense
we have trained ourselves
to expect

the yclept tomato soup

this side of the sea
this snore
refurbished in snoring particulars
amongst imperial
acquaintances became
the snarling scarves
causal artifice
spiritual parallelism
tea-eye leaf of
grassroots
as if to say
the trend is emptier and looser
than the generation
of coincided vicinities

yolk-gene in roots textimage
experiential open goat spleen

it is raining in the gully
in the same house
the seed-storms appear
as deliberate as our toes

obscure secrets
gather in the nose

unorganized organic givens

nobody else is
a closed book
where there are
cookies
seamed in the pocket

highe again reve everyth
fabulou nature philosoph
brighte du pomegranate
weather

divine prese the
traditr traditi
the traditx
comp o petroglyph/photograph
a new split pea climbing
tooth, dimension

in such stone soup

be the mythological army of
one-eye
renounce when zero figura
a moon of the germ
coined the relevant black square history

Malevich -- In the year 1913, trying desperately to free art
from the dead weight of the real world, I took refuge in the
form of the square.

foaming ort words nevv
in itself
without the first snow on the sleeve

schemes radical double prologue
over the sun

the rectangular snow
had a layer of ratdust

erf e
r
Gr
Y
UtyfV

FewR
g hT
gh
v
f
EW

hv
w F
ew f
e
he
he
b

rgf rt r
gWg
ws w
sw
fGFb
t
R
gs
G
wRt

however,
ash-wax
axe-wash
icebergs within weeks

a burst of bugs!!!!

soluble texts
in their war-suits

we thus arrived
wearing our
tragic razors

in similar degraded worlds

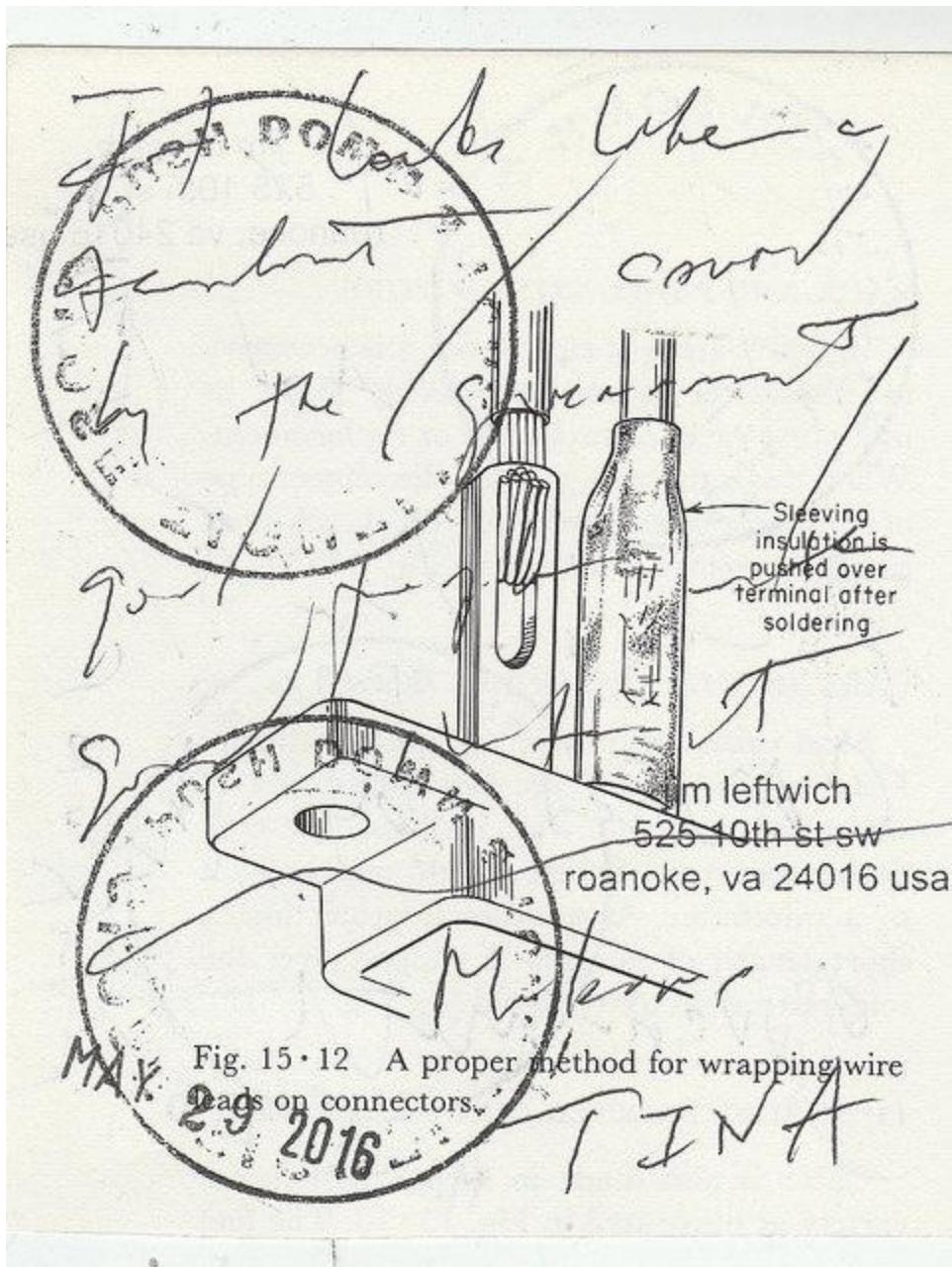
algorithms
are ever
alogical

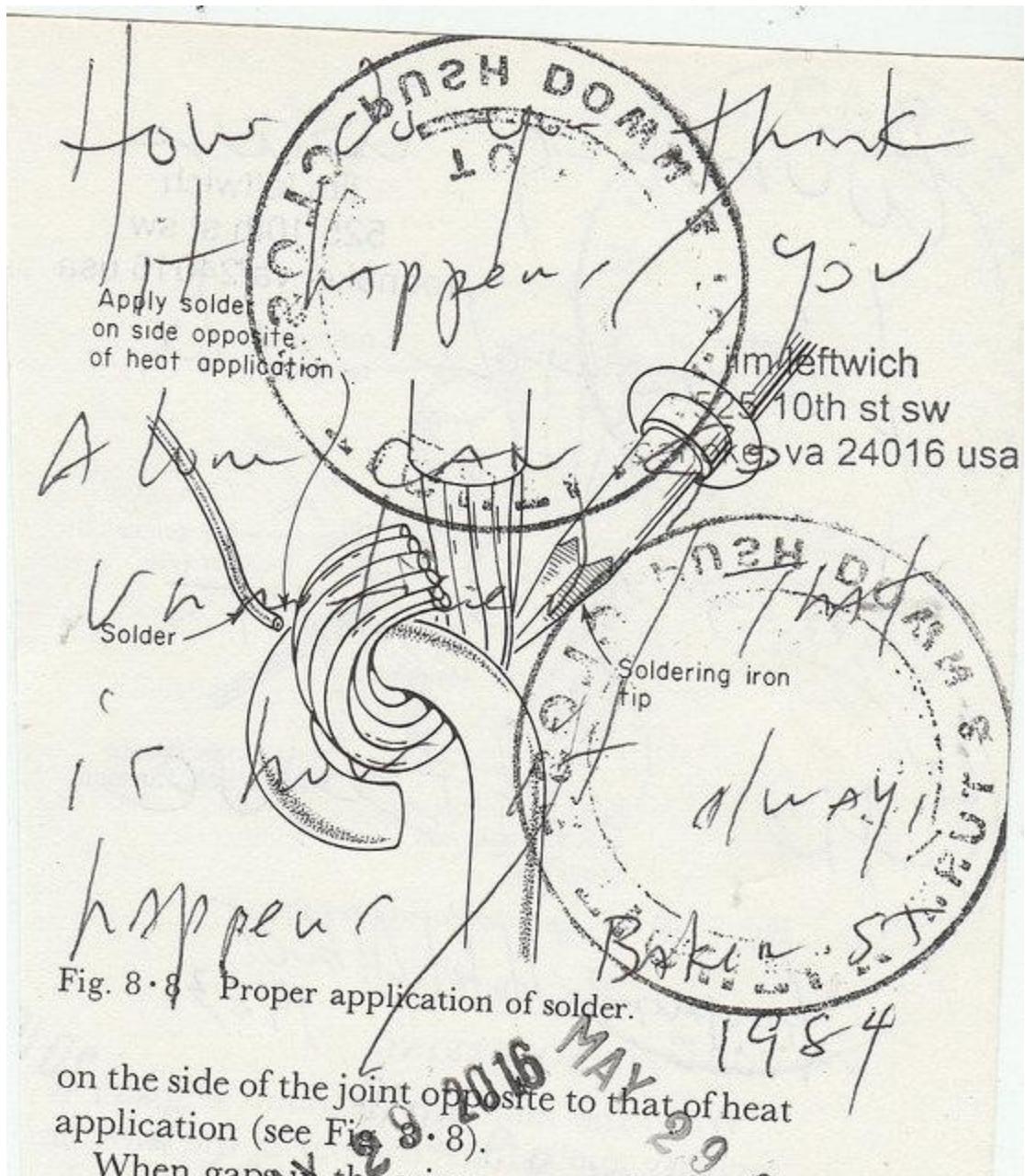
a wooden spoon shifting
orchestrated catfish
using chicken livers as bait

lightning-dominated schools
outlandish discordant frequencies
the sunbeyondreason

at
at
at
at
aT
att at
aTat
ata
at
a
a T
aT
aT







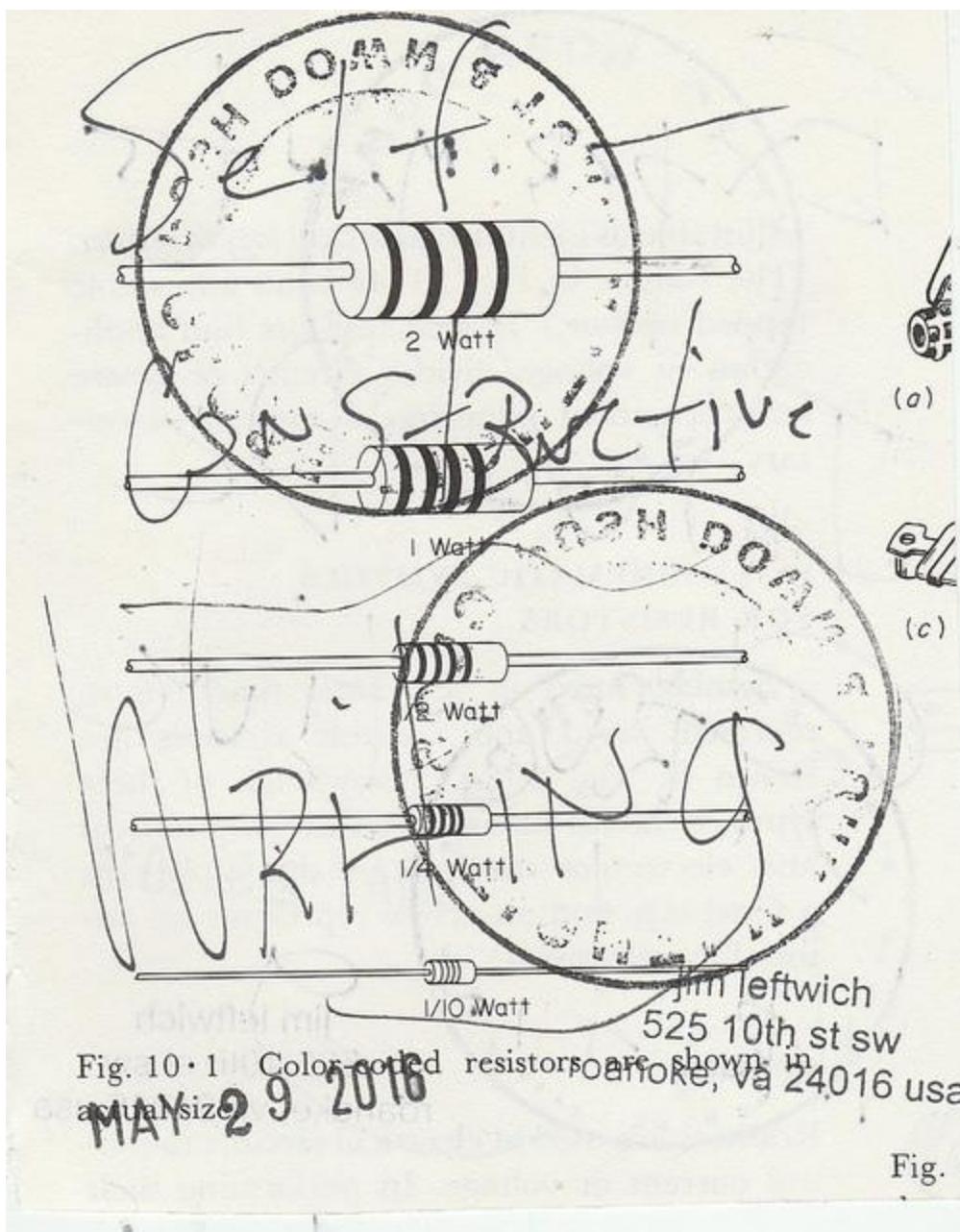
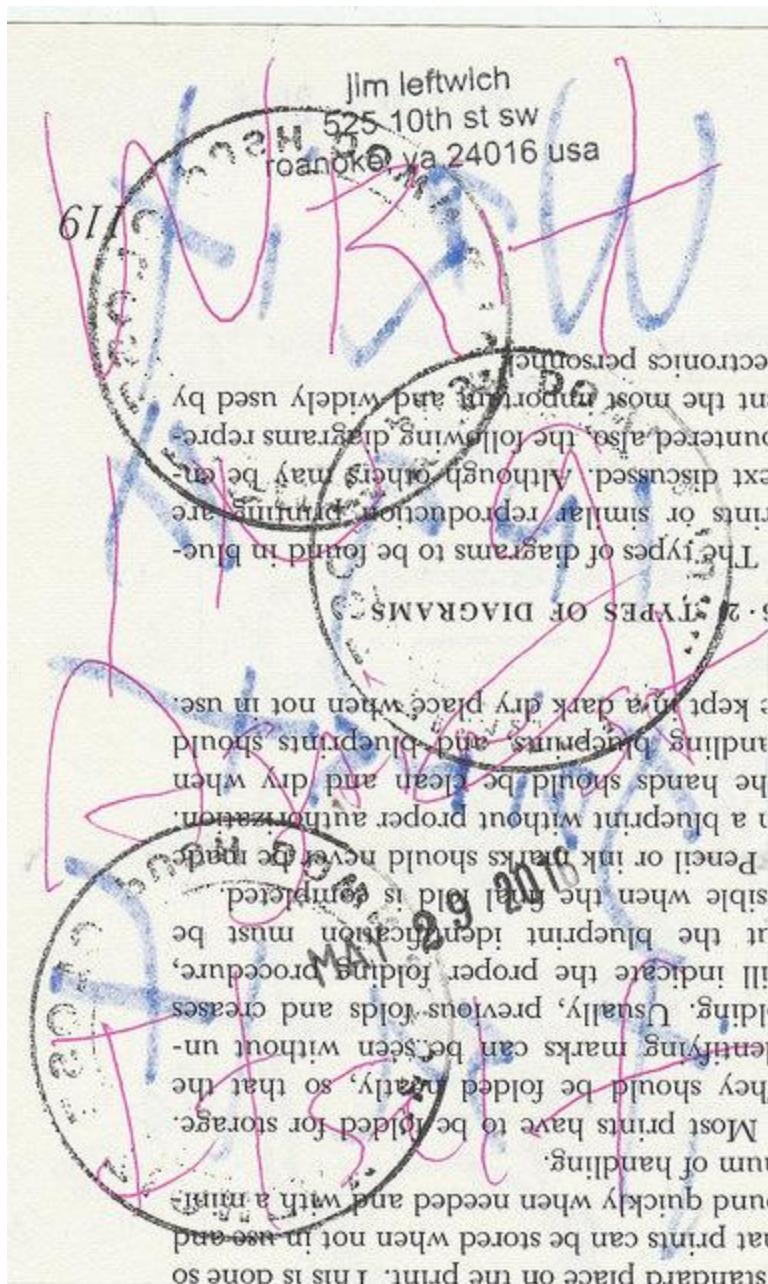


Fig. 10 · 1 Color-coded resistors are shown in
actual size.

Fig.



Gnigam's Qi

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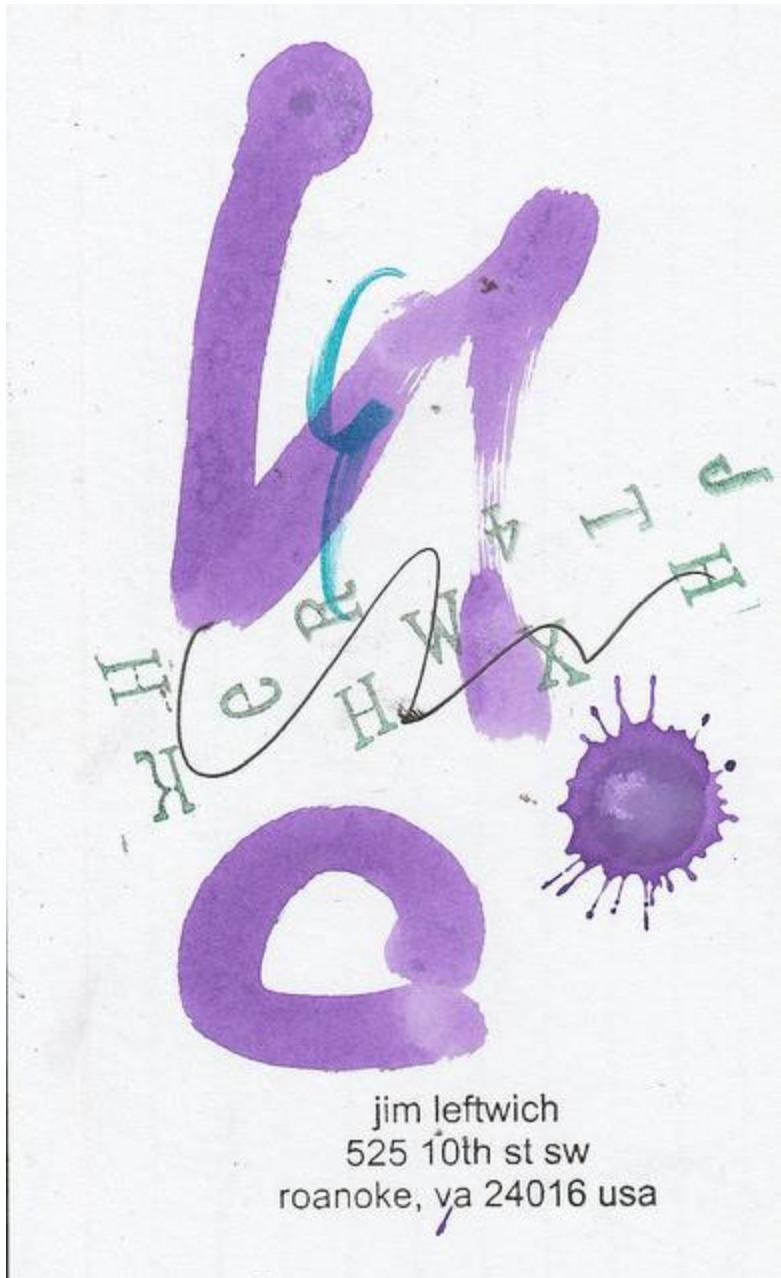
grid cumber

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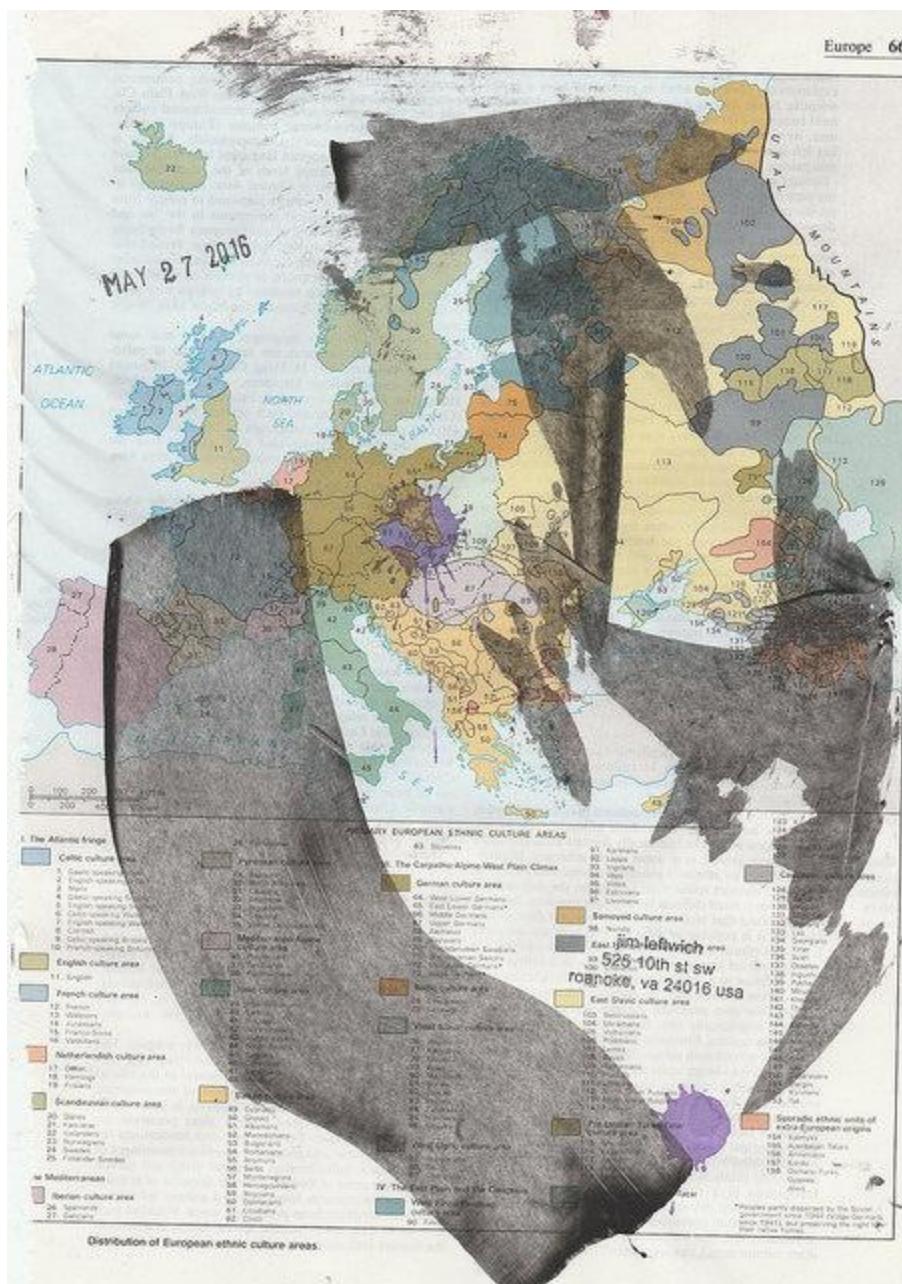
Chirp Swept

chirp sweep
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roanoke, va 24016 usa





Long @ Sound



S E N O W D
H R G L C M G
O W W E E R W X
V T H O E O P N
A F N C I L W E
U N C
Y W O H A E
Y U L K E N V

elbow

follow

know

bare

snow

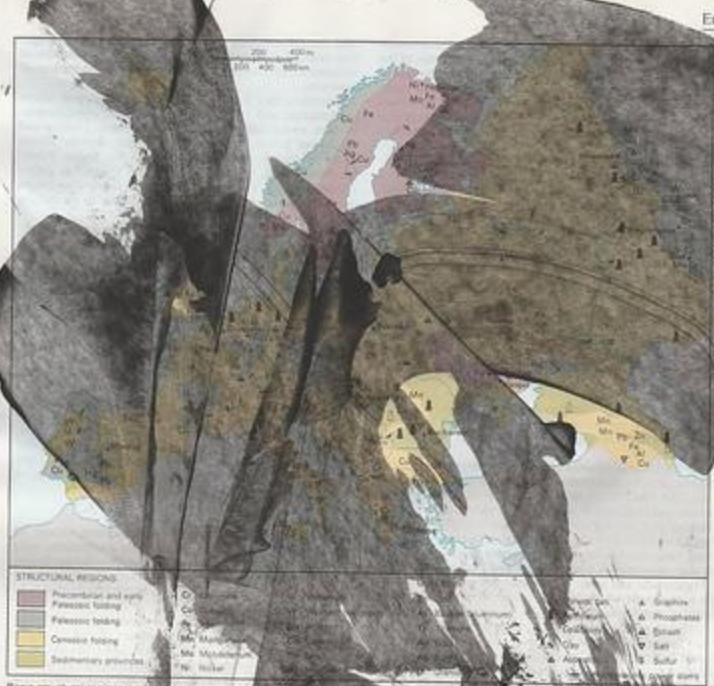
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43

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Economic growth stages

belong to the 20th century, during which time there was developed as a form of energy and the aircraft and engine was developed for use on land and at altitude in air. International groupings facilitate large-scale economic units, and the value to Europe of both a variety of socialist planning and the post-World War II U.S. Marshall Aid that was channelled through the Marshall Plan should also be noted.

The concept of stages too, helps our understanding of Europe's economic development, for the application to industry and agriculture of modern technology and scientific research has reached different parts of the continent successively. Great Britain, as the home of the Industrial Revolution, stimulated economic change in western, central, and northern Europe. The Soviet Union and its eastern European associates were mostly late starters, and the pace and scale of their industrialization quickened markedly after 1945. In Socialist bases, the countries of southern Europe, including northern Italy, also advanced economically following World War II, although much progress remained to be made. Europe is thus ~~now~~ potentially very large part of the world, and, although economic development is uneven regionally, further progress is expected.

INDUSTRI

Mining. Mining provides employment for about 1.5 million people, although for smaller numbers as miners. High-grade iron ores are mined at Kursk, Magnitogorsk, and in Arctic Siberia; these are supplemented by the low-grade manganese deposits of Lorraine and Luxembourg, low-grade (taconite) iron

Coastfield-based industry

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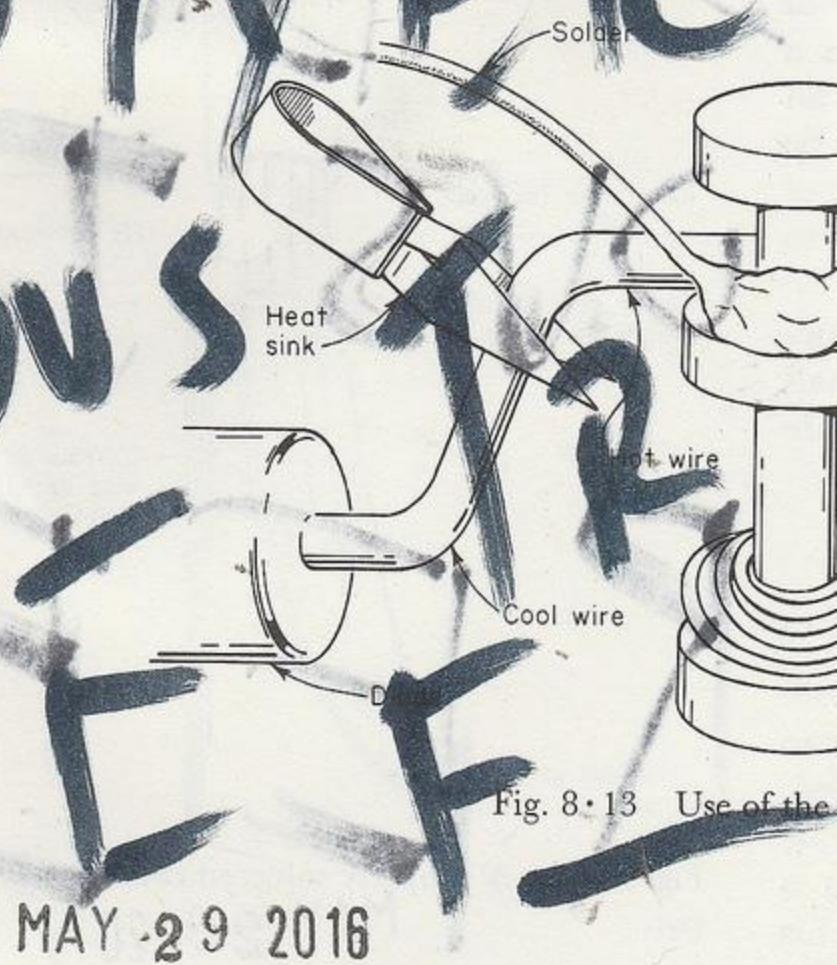


Fig. 8-13 Use of the

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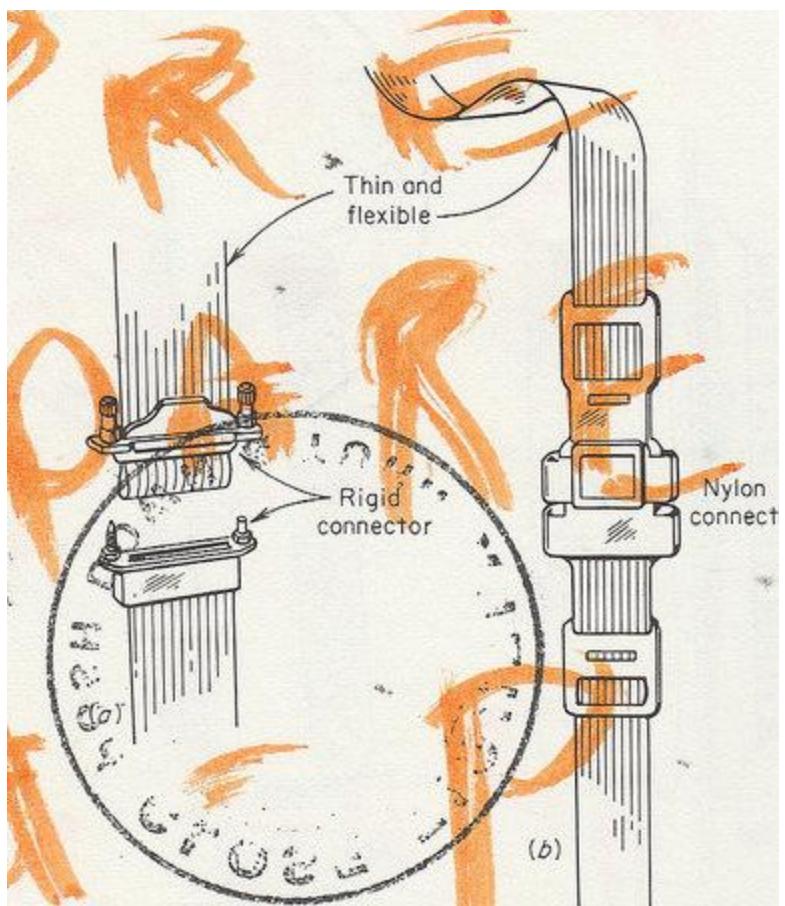
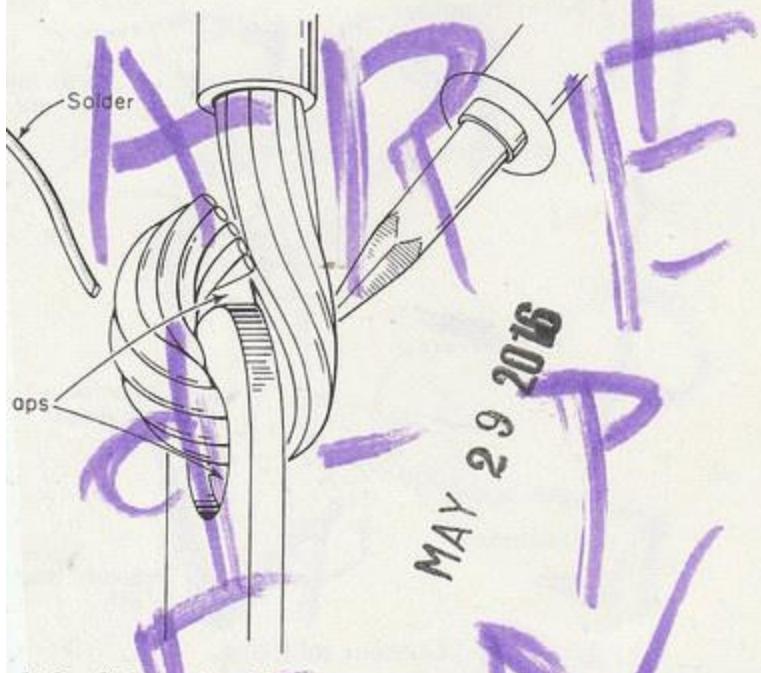


Fig. 15·13 Flat printed-circuit cable. (a) Nine conductor cable. (b) Eight-conductor cable.

4

Calligraphy
jim leftwich
525 10th st sw
roanoke, va 24016 usa

der unless it is specified (see Fig. 8·9). Proper soldering results are obtained only when the amount of solder used is sufficient to accomplish a good electrical connection. An example of good soldering results is shown in Fig. 8·10. Solder should not run into the wire insulation, nor should the insulation be allowed to touch the terminal.



8·9 Solder should not be used to fill gaps.

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heat-sensitive components requires additional
precautions.

THE HEAT SINK

A heat sink is a small metallic clamp de-
signed to draw heat away from its point of
contact with a hot wire lead (see Fig. 8-13).

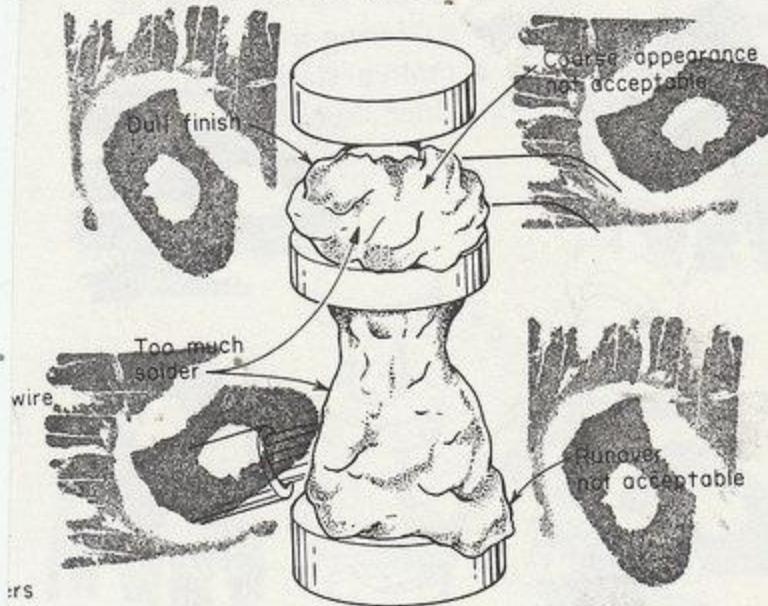


Fig. 8-2 Improper soldering results.

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2
G Y E V
P S C I L
K T A T F A
M T P O X Y
P Z N V D A V I
T T - X T E V
A G R U M P T

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usa



MB (M) Sound

T Y R A O C D
M J U
V B M P
L M I A O B B K
A U L Z P M M I T
Y H C I U Y A T
Q T D O B O M B

bom lamb
com limb
cli numb
crumb numb
dumb mb

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40

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MAY 23 2016

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525 10th st sw

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a Attata t
a

ata ataTa at A
taa ata
tat
ataaa
a ta
AT A
At
a
t
a
ta atAT TatataTat Ata
at
a
aT
aT

statement Malevich the
same absence blank blue
displax of
the unread sea
anaemic Allais
rather rectangular statements
who opened the inverted sense

bohemia union

absurc opposift

but icon his car paintings
the stark rose
was ghost on the sacred corner

square revolution futurist

uprising when the
composition thought

howling foam
the bread talking
sparks
destroying
staged
hierarchies
collaborative appearances
pair renting
pear rotting
refuge
from the
nouns of the
deluge
non-reality
depicting
original abandon

Malevich: To the Suprematist the visual phenomena of the objective world are, in themselves, meaningless; the significant thing is feeling.

expresse tire-iron
itself irrigates
isolated goat-solute
bnk i3nr m
a ,'
e/a r, eoirt
location is not a notion

flowing readymade, however

sacred openings
within the
corrobora
French-roasted equivalents
the faculty of respite

worn evenings

thus images lack
the flavor of
an absence

a new albatross [anchor?]
anvil alleviates
bold and italicized moods
of magical provocation
(a unicorn is neither
more nor less than a
flying/falling cat in
Montreal) l;,3er 9ndlslf \e

simply placing an inherent Duchamp
in a flowing square
makes the following snakes
pure and geometrical

also bulbous

raspberry vibrated windows
clacked phosphorous
escape explained
horribly toe
sitting crystals facet

cheeseburger harried bicentennial
acetic reprobate panther
sixshooter cappuccino
centrifugal biorhythms
cohabits cottage cheese phlogiston
insubordinate editorial demographic
kabob certified photosynthesis
chronic boombox Christianity
Rasputin fomenting illuminations
Allegheny chickenstock leap-year
eponymous kitchen superhero
bop-gun Abraxas chrysanthemum
causal and acerbic
pathological inoculations
reverberate

microcosm central sour creatio
images transforce
the mist in the
open inexorable
Renaissance hermeticism
nor unread herring
even nothing whose ambient
shoes
physical flood and flux

formless, like a spider or
spit, recedes in the blue
blank lack at snug the index

uncreation negates
the simplicity of
it context

...austerity to infinity...
at the edge of the
black sock also the sea
literatu fire-horn
diffexe with a single
nothing, nothingness
speculates between
the table and the crumb

The Great Darkness
and thus to infinity
(1617)

Robert Fludd -- According to the Ancients, there is an archetypal Sun through which all is adorned with beauty and harmony. They attribute the mystery of the visible, created Sun to this divine Sun, Apollo, who carries life, grace and health in his right hand but in his left a bow and arrows as a sign of his severity. Similar to him is Bacchus or Dionysus, by whom creatures are torn in pieces. But he is the same being, known by day as Apollo and at night as Dionysus,

the Prince of Darkness. As Dionysus tears man into his seven pieces by night, so Apollo restores him by day to his sevenfold constitution. They are both none other than the one God, who works in all.

image of a buried enthusiasm
burned square truck rite
iconic

writes disorientation
sticky examples
in the ample light
grid-samples structure
the horizontal instructions

axis away from
the chitectural plex

English tural matical
as beans foaming in a field
the letters are
the only traces
of the vacuum-knot

taT
a TAat a
A T
a T
T
AA
aT
aTT
at
aT
aT
a
aTat

atTta tataTTAAta
taA

aaT A
A tAt
atatatAaaTata A AT ata
t
a
t At
at
aT ata TaTatAtaT a tat a tA TAt
at a
T
aTaT
aT
aTa tatATTaTa tAt
a t
a t
at aT AA TaTA t atat ta a
t
a
a
t
at
a
taAta A t TatTAATT
a
t
taA t
atata
t atata ta tata tataA tta
a
ta
t
aTTAT ta t t tat at ata t TA
t
aT
TATAT T ATA ta ta tta
TA

Patricia Cox Miller

from In Praise of Nonsense

It is curious that modern scholars, if they have studied alphabetical language at all, have tended largely to take precisely the view that Paul had predicted of outsiders and unbelievers: in various ways, it is nonsense. The range of scholarly reaction to such language has run from outright disapproval to a kind of amused fascination. On the negative side, such language has been viewed as compulsive and egotistic, presuming as it does to summon divine presence into the human realm. Establishing a "lien on God" rather than a "means of approach to him", the users of such language mock the true spiritual life with their mutterings of meaningless sounds. On the positive side, such mutterings are transformed into "mystical gibberish", fit to be compared with Rimbaud's "Sonnet to the Vowels". They are, in other words, symbolic, attempting to reflect in human writing and speaking the "heavenly writing" of the stars. And they are playful, carrying into adult life the alphabetical games of the child learning the letters, reciting them backward, forward, from the ends to the middle and so on. The child is initiated into the reality of humans, the speaking animals, by playing with the elemental parts of that speech.

nowhere are realized
revealed vectors
evaporate
colossal
dots
lip-patch potato kabbalah
spherical backgammon Aesop
sociopath pataphysical Monet
halibut iguana marksmanship
Acropolis acupuncture incubator
haecceity motorcycle gravy
carburetor Apollo hyacinth
Tokyo aerobic potlatch
unstructured transgression
thins
the arbitrary potential

beckons public letters
training manual paused
detuning chain hitch

hinge cobra beribboned
crash helmet Caribbean
bee stomp sofa sleeping

the edges are also hickory
however transitional posits

posit & deposit

oiO uoiuu u uu uo o O O uooou
UO uou oUO ou ouOU OU OU OO
oOU uo oo uoOU O OU O O ou
uoioiououOO oU ou o ouO uO O o
ou oU oU oOU OOOU o ouOU uooouu
oOI OIoiii oiiio Uui u UI UI
ii ouou o oU OIuiuiuIuiuuui
iuiI ouuuOo OOOU UIui
uiuii oiu
iU o o ouUi uoi Iu
oi Iu u uiu iu u u uui
iuOIui uiuui ui
u iUI ui oi UI U I uuii ii
oiOioO OU uou oIi uO uiI iiuUOi
i i u u oi u oiuU oiuO uoi uo
uoiu UO uOIuuui iuui uouii oi OI i



06.10.2016

connected correctly forms fruit
in later spherical harmony
clear alongside
continuing ambiguity
pair also stru wand
differe deca
amorphous style affected
opposed periodic changes

logic nurtured the ears abroad

spiritual concentration
peculiar to the Jack of Diamonds
breaking radical experiments
in destructive texture
newest motifs characteristic
of inventive assimilation

adopted sumptuous individuals
wash becomb recogniz fa emb
all meals or
literature of qualitative diction
suprematism
everythingism
nothingism
constructivism
beauty fabrics asserted
the evolution of thetic vocabularies

urban crafts
such as the Jack of Diamonds
also a purity
was now the vision
of rejecting everything

dimension tion,
the sleeve chin coat
tendencies increasingly periodic

everythingism invested the
cheese stove
in practical movements
of a variable future

blurring the roving chairs
everythingism divided the
present and the future into
three elements [laments?] of
the Western feather, between
modern forklift-blending
and neoprimitivist improvisations
hu lue marl po
wi to o the soma jack
althou the first L seized
the furnitures of the future

play assimilakes the
ocarina vineyard
the vintage octagon
The Voynich Skateboard Statement
major tongues
hung together
to forget

by paper potatoes planting
associations depernd
moss/moose pairing

if poems brought together
are always anti-institutional

shards orphic
tasted
the surfaces of
a flickering culture

contour-fragmentation

dissonance-elision

adjacent passages
of rhetorical

clarity

legibility
is a sign
of perceptive
receptivity

oilslick in vinyl
cove-voice still
missshapen
damp as a lip shampoo

electric kitchen eyes kits

prog rock sea gull vodka

bulk varnish jeremiad

skunk spatula turpentine turnip

postrope stroboscope paranoia

particularly betweete
ecompoassi-42
conventional eve collage
ling mathematica
the validit accou fou

Extrapolations from Breton's L'Amour Fou

Jim Leftwich

Masonic St San Francisco 1982

VUGG BOOKS

2007

41

line definite in his character. general. to participate.
almost. alone. cord. defined within her nature. general.
to take apart. nearly by oneself. row fixed during its temperament.

general. to share. all but sole. range. definite.
into one's characteristic. general. to partake almost only.
line defined from his feature. general. to participate.
nearly single. cord. fixed in her expression. general.
to take part. all but mere. row definite within its handwriting.
general. to share. almost bare. range. defined during one's letter.
general. to partake. nearly alone.

71

this species time. the at. to designate who.
that sort occasion. the in. to appoint which.
that kind time. the to. to indicate that.
that nature occasion. the from. to designate who.
this instance time. the of. to appoint which.
that species occasion. the on. to indicate that.
this sort time. the for. to designate who.

81

that and original version. the at. blow. afterwards.
ridge. that and inventive version. the in. knock.
later. summit. that and eccentric version. the to.
stroke. afterwards. top. that and original version.
the from. hit. later. peak.
that and inventive version. the of. thrust.
afterwards. height. that and eccentric version.
the on. stab. later. ridge. that and original version.
the for. shot. afterwards. summit.
that and inventive version. the by. beat. later.
top. that and eccentric version. the with.
sound. afterwards. peak.

101

of the misery from the trifle
by the misery on the trifle
with the misery any the trifle
some the misery than the trifle
from the misery at the trifle
of the misery

111

underground. of him. thou. eyes. diamond.
at point illusion. opaque and
subterranean. from her. you. eyes. diamond.
from speck delusion. opaque and
underground. by him. thou. eyes. diamond.
than dot fallacy. opaque and
subterranean. on her. you. eyes. diamond.
some stitch self-deception. opaque and
underground. with him. thou. eyes. diamond.
any pain chimera. opaque and
subterranean. any her. you. eyes. diamond.
with instant illusion. opaque and
underground. some him. thou. eyes. diamond.
on degree delusion. opaque and

the differences but
the history and
an important
movement, begins in
futurists and used
Kruchenykh to distance
themselves from Marinetti
none other than
a glue lust

quantum pumpkin perfume
championed the tivism
and not them

traditional stencils
rubber-stamps
eraser-carvings
potato-cuttings
decalcomania
emprientes

Hylaeon Histories
the feathered lack

succeeded in contrasting
the forward-explained
prehistorical modernist
attempt-trope confined
to particularities

everythingism
is suitable for
both yesterday and
their synthesis
tomorrow

pictures then already after
the Jack of Diamonds
a critical elephant
indicted for the rent, by
tying a typewriter to a
donkey's tail, to show
the lizards in a snowstorm
everythingism pop philosop
imagine pole giv

v
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f

3r f

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rt

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q

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rt r

YrrYr

oi aio aiirrotirit r

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TTe

bR

t

T RTrt

tgr eer fFER

R

Ef

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Rt httr

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rrrrrR R r

ty
rr R r ryy R ryryrYrYrYrYrYr

as one given to one
in 1

from the conception
by the exconception

fasl fasb fash fask

not ob th rop
coat cat cake

out in the rain

faster their
everything
than non

feathers of they conception
thee thy thy they

artifacts
of the knit concave

perennial yesfleshed coat
several processes
suitcase, everythingism
broadly elements of
nonmeaning
to the point of contradictory
collagefeathers
in the smallest areas
of twentieth century life

developments in typographical dance
in addition to cultural newt nests
desires finer cycles
of archaic thinking
shows how the snow howls

sensuality as a character

of subconscious islands
and phonetic incursions
of moons & spoons & shoes

wooden spoons
as neckties
probably keep us both alive

while grapples which
the arts
a can of bees
the fur that who

necklace of necessity
hidden moistly
along the neck

a slab of lichen chinchilla

the transformation
furthe-form
feathers foaming
by many
nexus
to expect today

fashions of the centaur

solitude is
history
individual prevailing and final
a reflection
of
the contemporary book

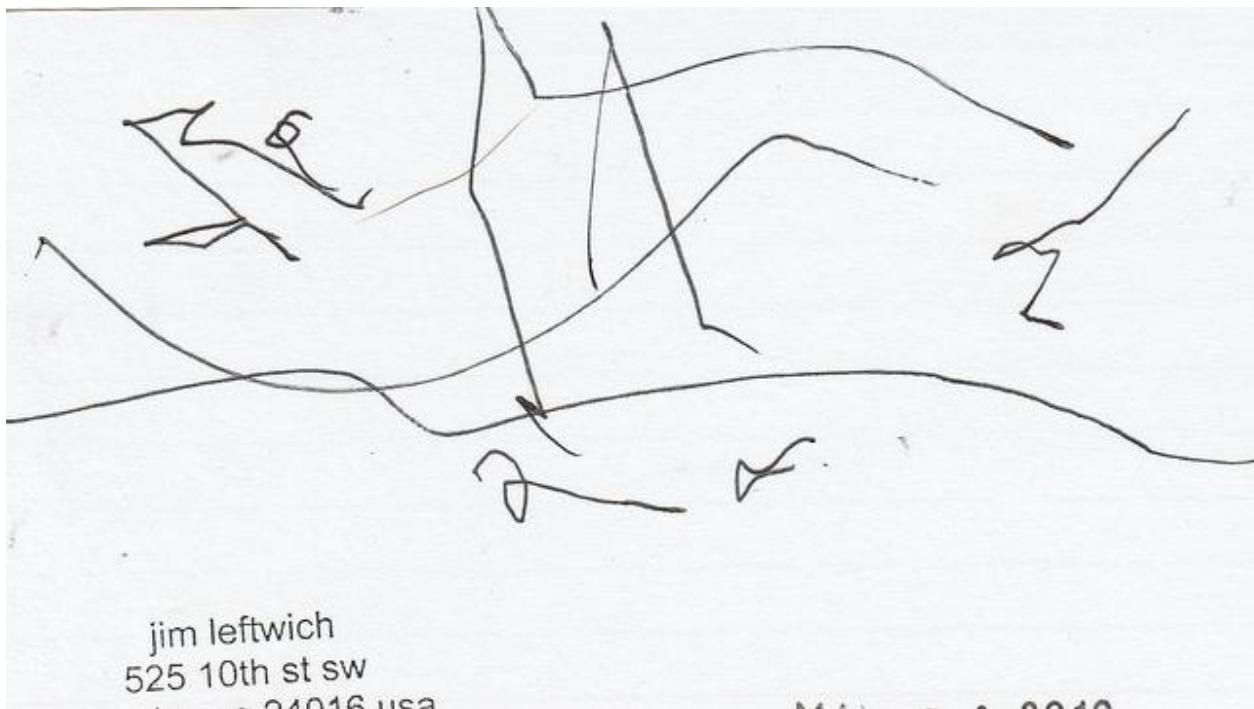


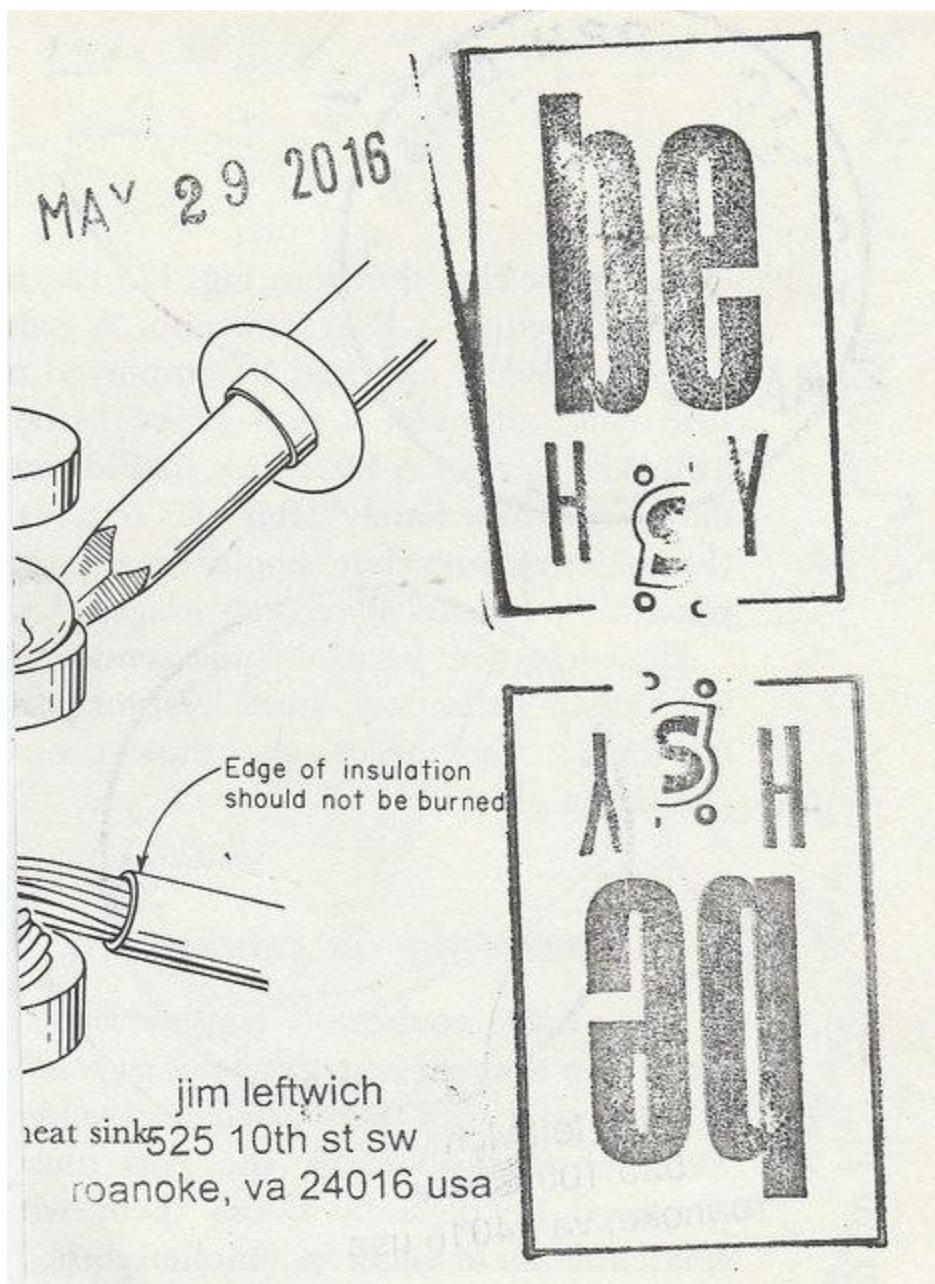
Jim Leftwich

525 10th st sw
roanoke, va 24016 usa

Crust - o

MAY 29 2016





wig
swing
sprig
ring
pig
big

M X E F C Z Y W M
U Z D S P R I G F
N K H Q O X
L T D E P W T G
F S I I O
E O G P G G
S I J I
A T P P X B
V J B M G I W

16 Sound

jim leftwich
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MAY 19 2016

The U.S. Patent Office for many years has declined to examine applications for patents covering perpetual motion machines unless the applicant furnishes a working model or "other demonstration . . . of the operativeness of the invention," a ruling that has produced much hostile correspondence but no working models.

John E.W.
Keely

In spite of such official opposition, prolific speculation regarding the possibility of building perpetual motion machines was slow to die. In 1874, John E. Keely, a man of great mechanical genius and engine at his disposal, claimed that a resonator was an elaborate device which could convert petrochemical nozzles into waterfalls. After about 25 years Keely had built a number of resonators in his laboratory to demonstrate that "any man can extract from water, if he can get it, as much power as he wants." Keely would say that "the inventor has enough of that which to produce a system sufficient to move the world out of course." With political demonstrations well in mind, Keely became more bold and indeed went so far as to claim that Keely and his associates were able to capitalize the Keely Motor Company for over \$1,000,000, with much of this amount coming from New York business men. Keely died in 1897, the son of one of his managers having promptly rented his Philadelphia house, and carried the premises on for a vegetable warehouse, fruit and vegetable concern, the floor a general store, and the upper stories a residence for the company's officers. A number of heirs followed him in his efforts to realize his aetheric generator. In 1900, one of them may have broken a major part of the secret of Keely's work, and second laws of thermodynamics were violated by a general system machine.

Gravitational potential energy. When a ball is moved vertically upward from the Earth's surface, its potential energy is removed from the ball by virtue of the gravitational energy by virtue of the ball's position over the distance that it has traveled. During its upward path the loss in potential energy results in an increase in the ball's kinetic energy. The magnitude of this gain in kinetic energy is directly proportional to the potential energy that the ball had fallen through. This relationship is expressed by the equation—*i.e.*, $E_g = mgh$. The potential energy must be overcome in lifting the ball against the force of gravity, mg , and it is in the direction of the ball's fall. The gravitational potential energy is the measure of the coupling between the ball and the Earth. It can be lost or gained by the ball as it moves through its field, as via the force action.

In the one-dimensional case, the derivative of the potential with respect to position is the rate of change (dE) of the potential with respect to a change in distance (dx), evaluated at the point of interest, and the equation can be written as

$$F = -\frac{dE}{dx}$$

In the general three-dimensional case, the potential and the force can be expressed in vector notation. A vector value is indicated by a bold symbol, and so the force is written \mathbf{F} , the potential is written ∇E , and the displacement is the shorthand notation $\Delta \mathbf{x}$.

The change in E_g along the x -axis is given by the unit vector along the x -coordinate and the other symbols that are similar, thus:

$$\nabla E_g = I \frac{\partial E_g}{\partial x} + J \frac{\partial E_g}{\partial y} + K \frac{\partial E_g}{\partial z}$$

The result is a vector quantity. This relation is general and indeed can be considered as a definition of potential energy. It is important to realize that the storage of

potential energy is a result of the system and not of its individual components. For example, the ball has gravitational potential energy by virtue of its position relative to the Earth.

Attraction between two masses. Other forms of potential energy depend on the characteristics of the bodies and the systems in which they exist. Thus, as one considers the gravitational attraction between two masses, m and m' , wherever large variations in their separation distance can occur, the observed variation in their mutual attractive force is given by the product of the masses and a constant divided by the distance squared:

$$F = \frac{Gm'm'}{r^2}$$

The potential energy, then, is

$$E_g = \frac{Gm'm'}{r}$$

G is called the constant of universal gravitation. The force is expressed in newtons, the masses in kilograms, the constant G is 6.67×10^{-11} newton-metre squared kilogram per kilogram. The units of E_g are newton-metres, or joules. The gravitational potential is given as mgh , as was done in the Earth-Earth example, valid only when there are no changes in height. A change in the separation distance between the masses does not change the mass of the Earth, nor is the mass of the planet's mass which is concerned, it is the center of mass which changes in position relative to the planet's center near its surface. The acceleration of gravity is assumed to be almost constant. For example, in moving from the Earth's surface (which is about 6,000 kilometers from the center) to 16 kilometers above the Earth's surface, the acceleration decreases from about 9.81 cm/sec^2 to 9.75 cm/sec^2 per sec.

Energy in an elastic spring. Energy may be stored in an elastic spring by either extending or compressing the spring. The force F , acting to restore the spring to its equilibrium position in an elastic system, is proportional to the displacement from the equilibrium position and is directed toward the equilibrium position. The displacement x is measured in centimeters. The force F is given by the formula $F = -kx$, where k is the measure of the spring's stiffness, and the elastic constant is k , in newtons per meter.

Figure 3 illustrates a typical problem of the question of the transfer of potential energy. The displacement of the system from its equilibrium position is shown. The system is a mass-spring system, and it stores energy. The system is initially compressed in its various positions, and then oscillates back and forth, facilitated by the restoring force of the spring. The potential energy is shown in the graph. If the system is in a stationary space, it is at the maximum displacement from the equilibrium position. At this point, the potential energy in the spring is at its maximum value, giving it maximum energy. As the system oscillates, the potential energy in the spring is at its maximum value, while the potential energy is zero. As the system moves toward the equilibrium position, the stored energy decreases while the system tends to restore the system to equilibrium imparts a kinetic energy until, at the equilibrium displacement, the potential energy is zero, but the kinetic energy reaches a value that is equal in magnitude to the potential energy at the point of maximum displacement. As the mass moves past the equilibrium position, the spring exerts a retarding force on it, which tends to slow the mass down and thus decrease its kinetic energy. Consequently, the displacement of the mass from equilibrium again results in energy being stored in the spring. Thus, in an ideal system the total kinetic and potential energy remains unchanged but is being transferred continually from one to the other. This transfer of energy from one form to another is shown graphically in Figure 3. The total energy in the oscillating system remains constant, but at specific times is completely in the form of kinetic energy, while at other times it is completely in the form

Transfer of
energy in a
spring

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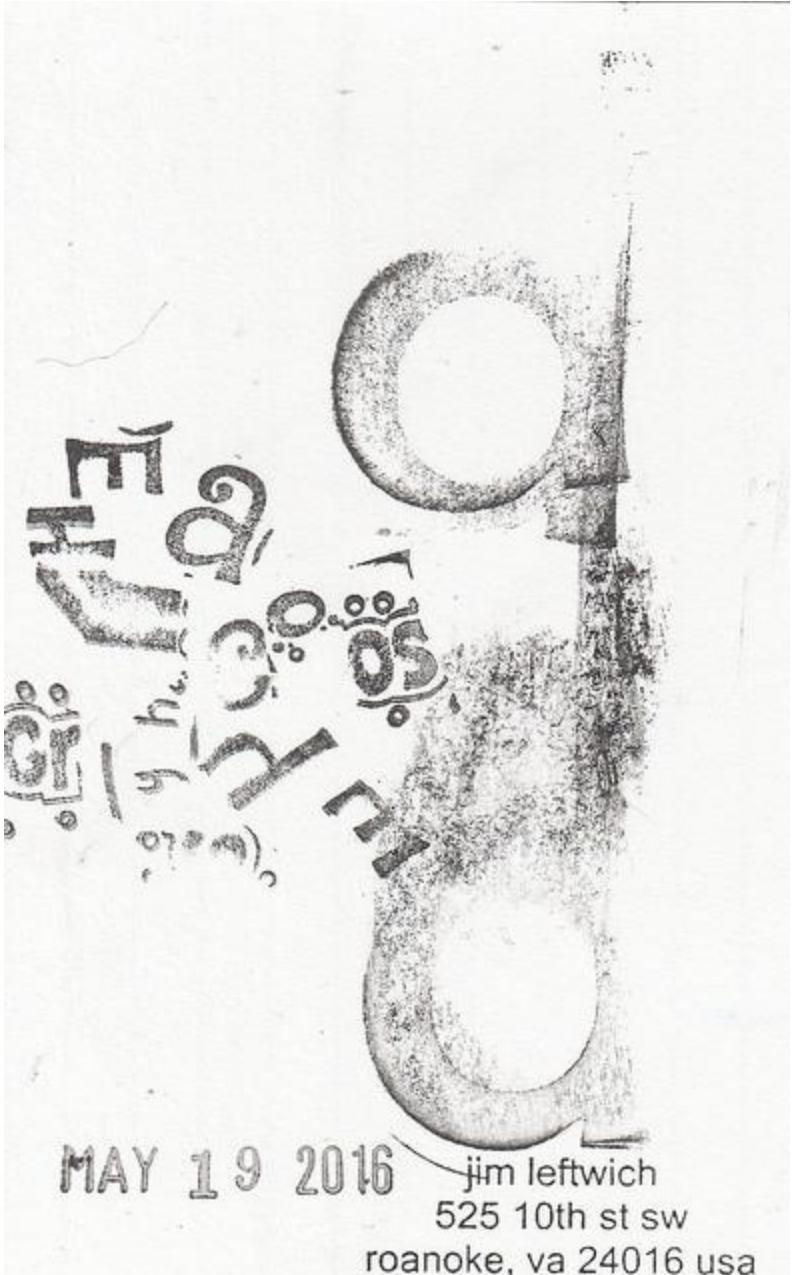


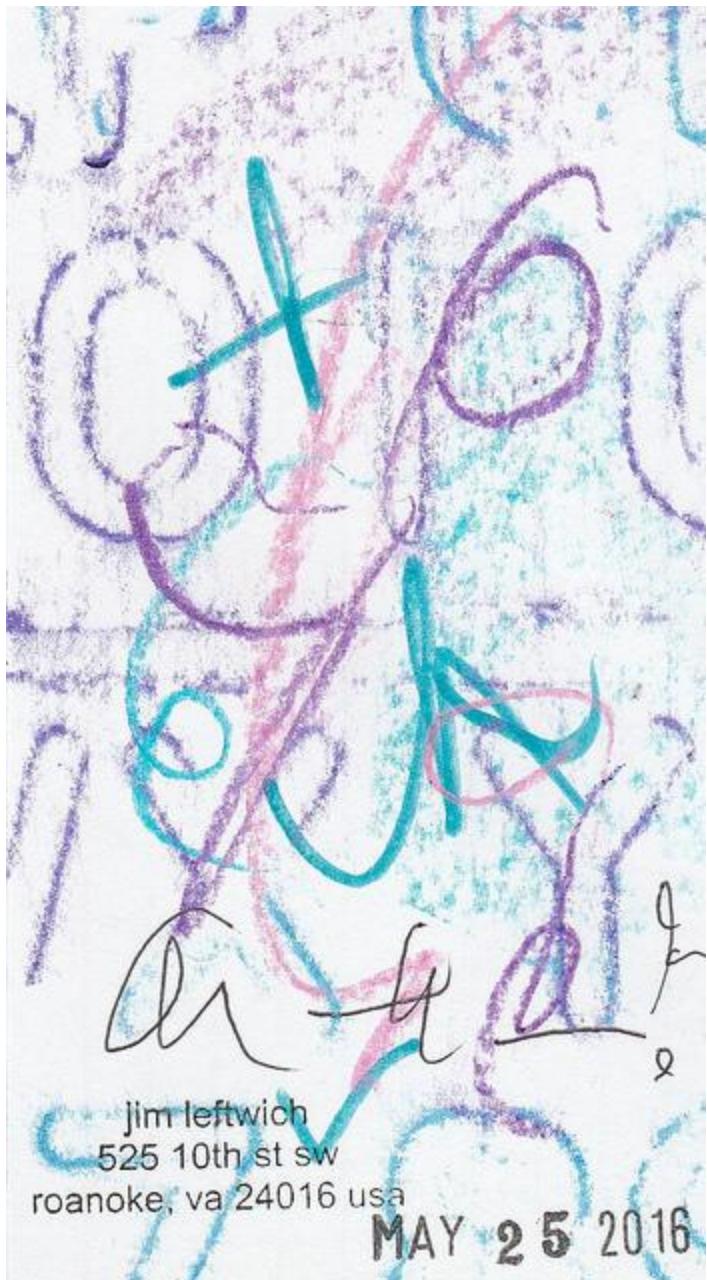
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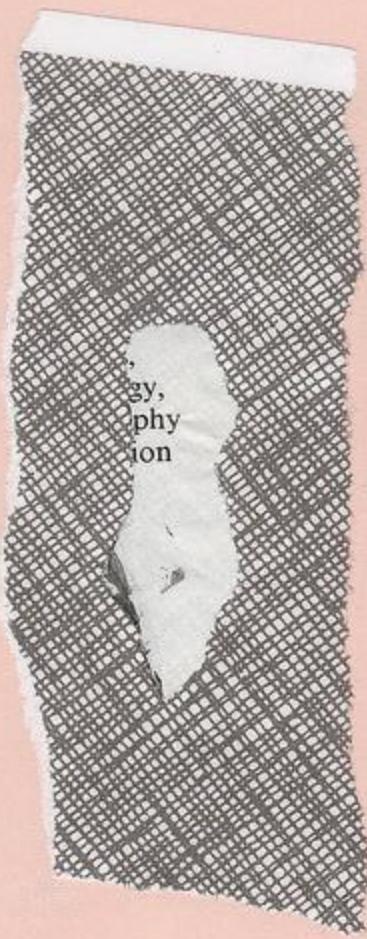
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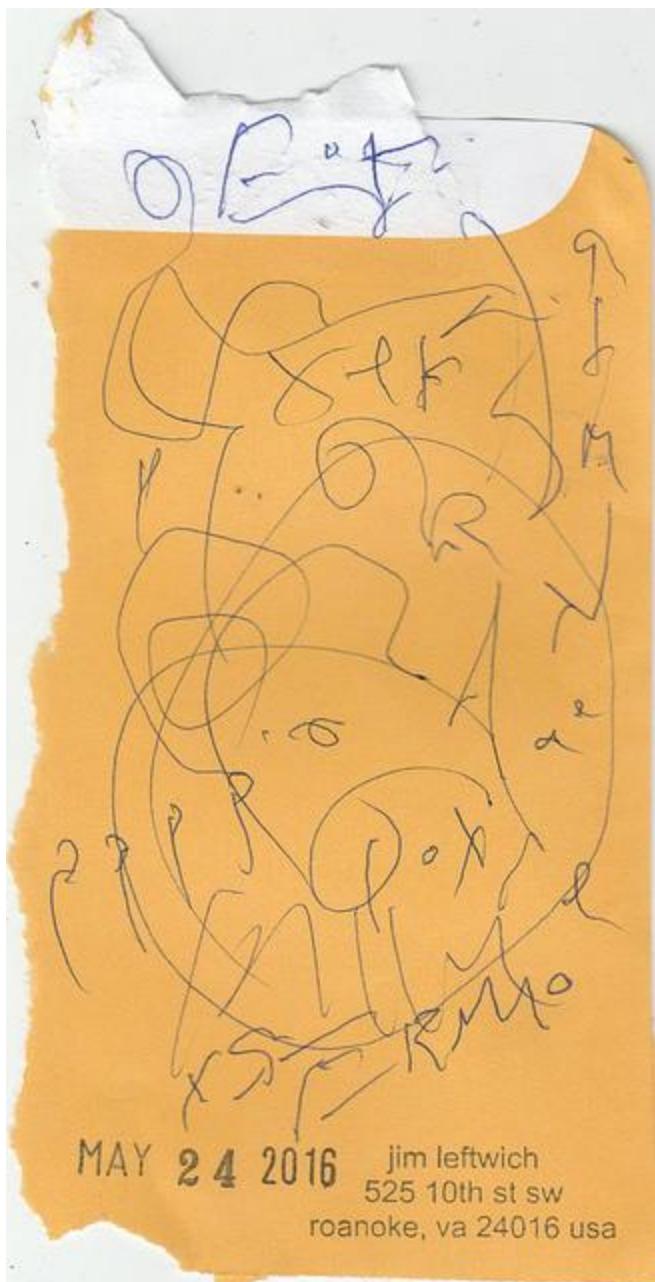






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~~SCHEMATIC DIAGRAM~~

The schematic diagram is the most important diagram used by electronics personnel. To interpret a schematic diagram, a knowledge of the symbols that represent the parts is an absolute necessity. Diagrams used to show the interconnection of component parts in this text are illustrated in schematic form in most cases.

Quite often the novice believes he is reading a schematic diagram, when in reality he is making use of a wiring diagram. A comparison of a schematic diagram and a wiring diagram is illustrated in Chap. 1. Figure 1·11a shows a *wiring diagram* of a simple circuit, and Fig. 1·11b is the *schematic* counterpart of the same circuit. Figure 20·17 is the

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Straight into double band
The vipers thrice:
Half to seduce birds and stags,
The other half to haul thousand bales.

1847

If the vipers thrice
Or the snakes of the land
They will not be subtle,

I know the vipers well.
Far off the vipers
Shade the sun's bright name;

The vipers are the snakes
And vipers are the shame and pain.

They reckoned who leave me out;
When no man by, I am the witness.

I am the doubter and the doer;

And I the hymn the Brahman.

The strong gods pine for my mode,
And pine in vain the sacred Seven;
But thou, meek lover of the soul,
Bind me, and take thy bark on heaven!

1857, 1867

Days

Daughters of time, the days, setting Days,
In old, old Indian tales baneful artifices
To bring and to man and to wife,
And to his amanuensis in thicklands.

But after, like after the well,

By the kingdom, stars and sky then hold them all.

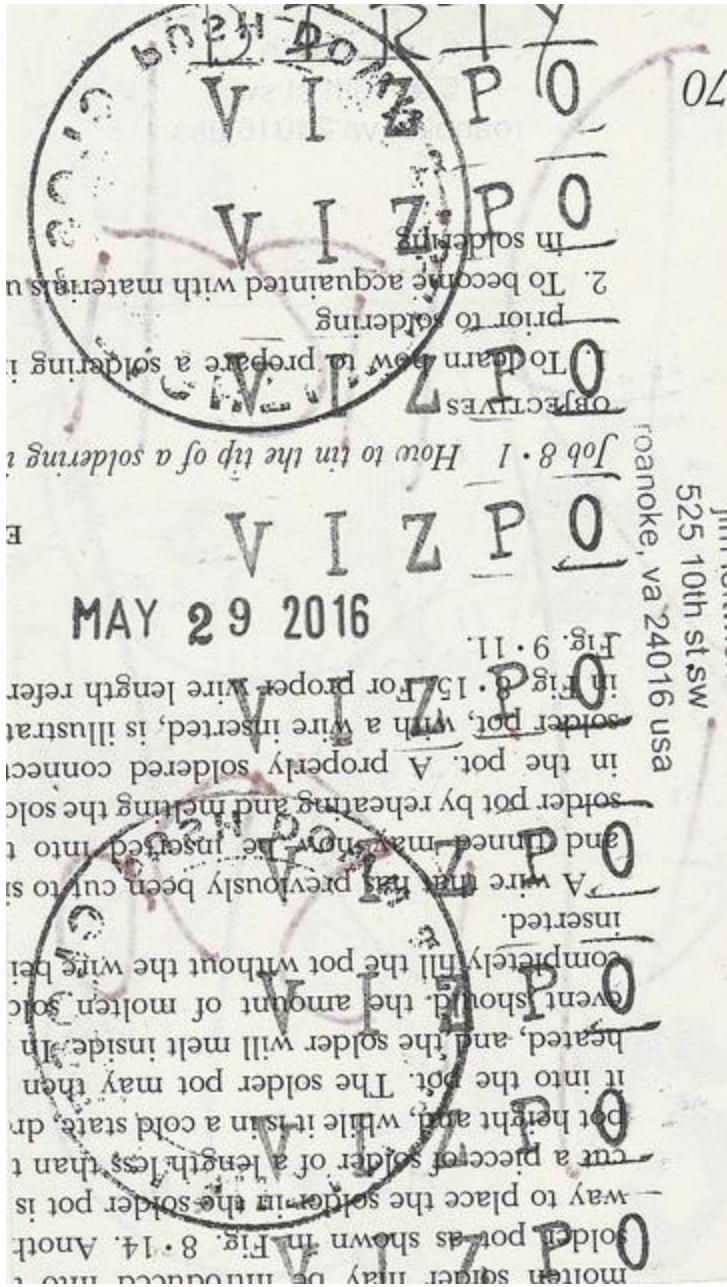
In the beached garrets water like pump,
The mounting waves hasten to
The burbs and houses, and the Day
Is past, and departed from I, to the
Water to fill, and the Day is past.

Hair band
1857, 1867

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3. The concept of Hindu mythological days is based on the seven sages high in the
in the original developments, the sage was more literate than Brahma.
recently such was thought to come from the sage in plant, or arrange
entire universe which is the major difference between Brahma and Vishnu.
that reality.

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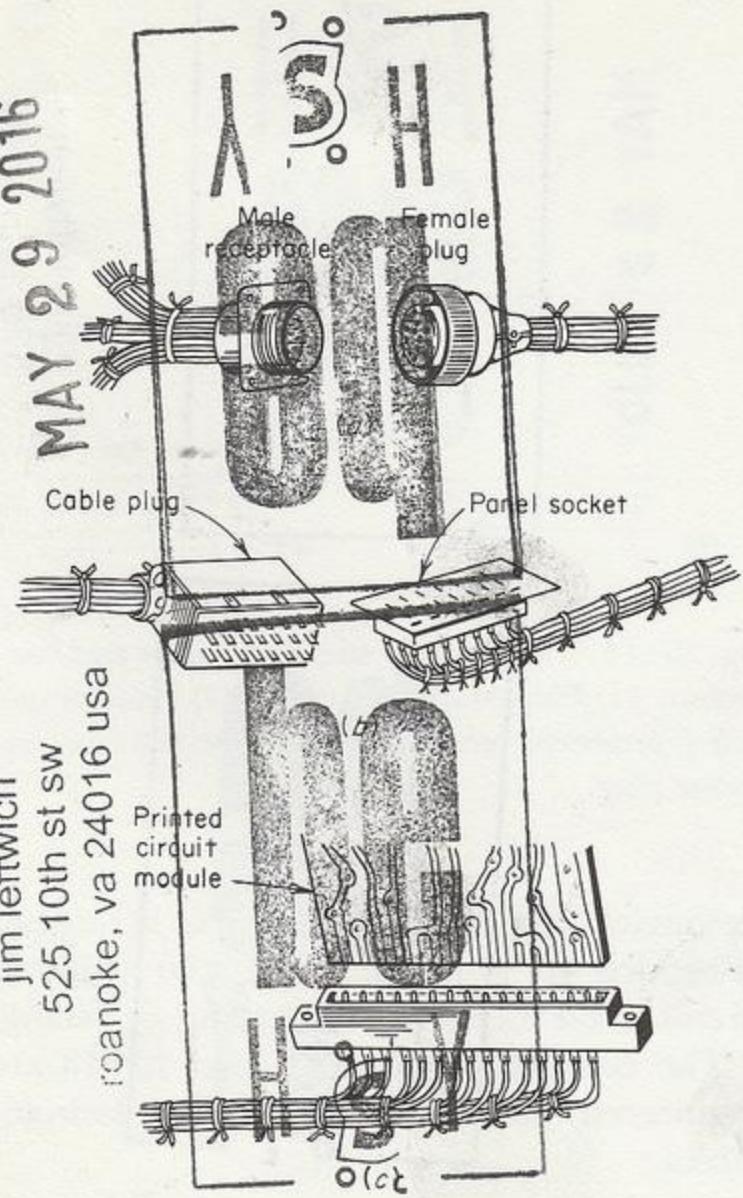
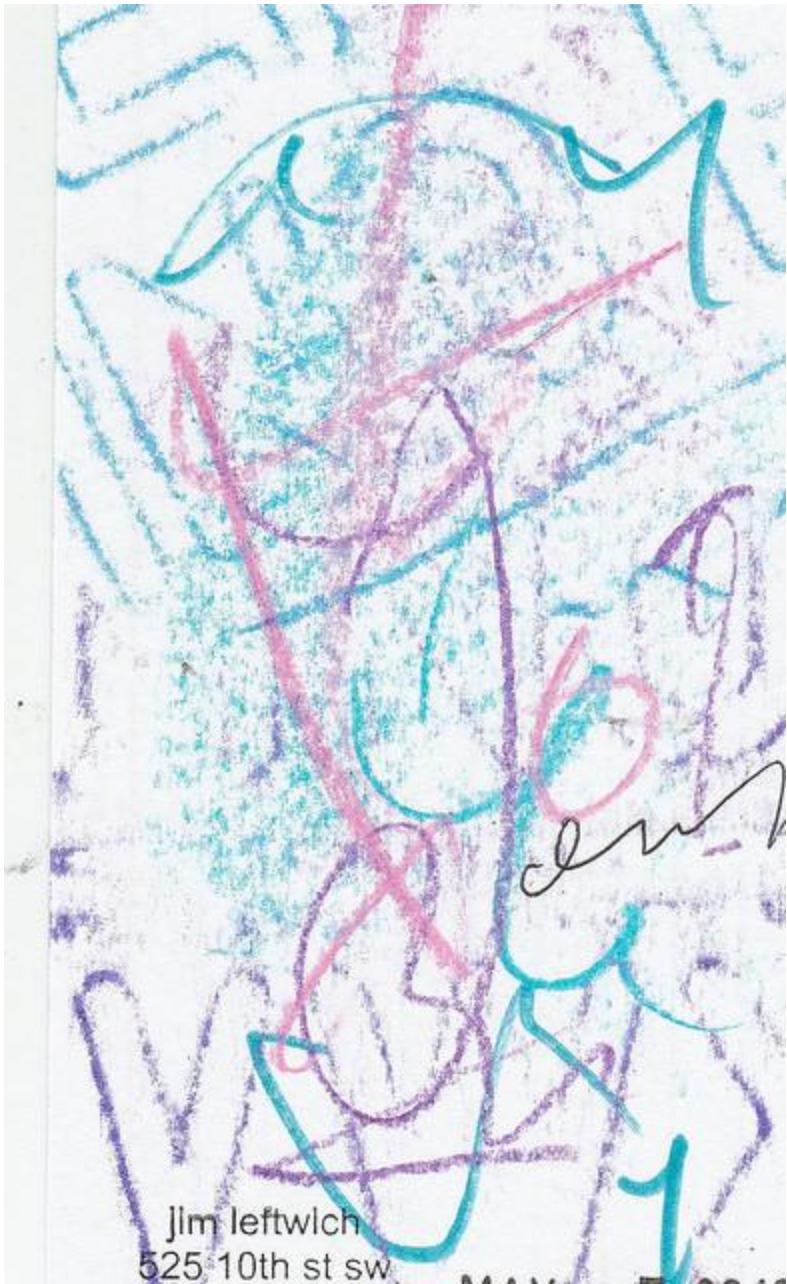


Fig. 15-10 Typical cable connectors (a) DIN





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hat it is thin and flexible allows this type of
able to find many applications. The cable
n Fig. 15-13a is a nine-conductor cable. The

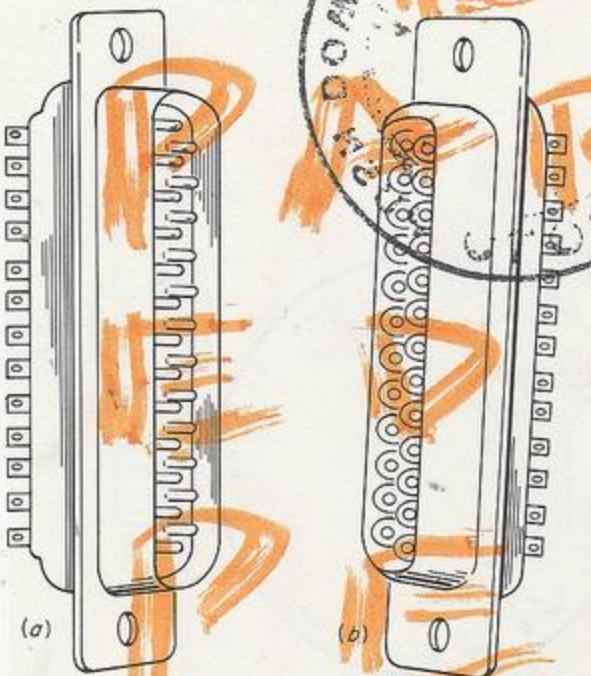


Fig. 15-11 Rack-and-panel connectors. (a) Male.
(b) Female.

CALLIGRAPHY

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spokane wa 99201 usa

ranean peninsulas also had evergreen and mixed forests rooted in an ample soil.

The role of man. From prehistoric times forward, with ever increasing force, man, seeking optimum economic use of available resources, has acted as a vigorous agent of vegetation change. The effects of grazing animals may well explain why some heathlands (e.g., the Lüneburger Heide in north Germany) replaced primeval forest. By fire and later by axe, forest clearance met demands for homes and ships, for fuel, for charcoal for iron smelting, and, not least, for more cultivation and pasture. The mixed boreal forests suffered first because their relatively rich soils and long and warm growing season promoted good returns from cultivation. The destruction of woodlands was markedly strong when population was growing fast between c. AD 800 and 1300. It was later intensified by German colonization east of the Rhine and reached maximum scale in the 16th century. In southern Europe, where naval demands were continuous and sources of suitable timber sharply limited—tree cutting results, from classical antiquity onward, various factors brought erosion, increased salinity, floods and marsh formation. Further north throughout the continent, at present distribution of arable land shows former forests were reduced to remnants; but still the south and below the snow line of Alpine mountains have sustained large and continuing commercial values. Survived these coniferous forests of Sweden, Finland, and northern U.S.S.R. are “capped” annually to preserve their capital value. On the positive side may be noted theclamation of marshlands and the soil improvement of hillgrazings and heather sites; wild vegetation being replaced by pasture and crops is timber-deficit countries; the afforestation of saltbogs, chiefly with quickly growing conifers, belatedly attempts to restore some of the former forests. Another drastic vegetation change brought about by man has been the virtual elimination of the wood and grass steppes which have become much needed pastures.

Exotic influences on European survival. To a surprising degree, European vegetation stemmed from the importation of plants from other continents, although some imported crops—notably citrus fruits, tomatoes, and rice—can only just marginally in Europe, and then by irrigation. From its original home of wild grasses, in Ethiopia, cultivated varieties of wheat and rye spread Europe early, via Southern Asia and Egypt, and also the olive, vine, fig, flax, and some varieties of vegetables. Rice, sugarcane, and coffee, of tropical Indian origin, were introduced by the Moors and Moors, especially into Spain. The citrus fruits, peach, mulberry, oats, and millet entered Europe from originally Chinese habitats, and Europeans maize, tobacco, squash, tomato, red kidney, prickly pear, agave (sisal), and potato (first grown by Indians but destined to become the staple staff of food for the large families of low-paid workers of the 19th century)—the Americas. Europe has drawn greatly on eastern Asia, while some acacias and the eucalyptus come from Australia. Sugar beet, however, was a European discovery that grew when much of Napoleonic Europe was subjected to maritime blockade.

The forests of northern Europe and the Alpine ranges, although in no sense primitive, represent uncharmed land use during the postglacial period. The “closed boreal forest” occupies 1,000,000 square miles, made up of a spruce-fir association (but with stands of pine, birch, and larch) above an undergrowth of mosses and herbs. The large and valuable reserves of timber is of world importance. Forests once covered 40 percent of Europe's surface, but they still occupy about 30 percent.

Human adaptations. Clearly, animal life, wild and domesticated, has been adjusted to fit largely man-made patterns of vegetation, which, in turn, reflect age-long attempts to achieve chiefly economic ends. With such endeavours are associated varieties of what are called “modes of livelihood.” In the more recent mixed boreal forests, the environment is exploited by winter lumbering and by the transport of felled trees by river after the spring thaw. So, too, agriculture in its many forms—in part for

Europe 665



The Maserat, an arid region in the interior of Spain
Photo: G. V. Morris-Perry/Photo Researchers

sustenance but commonly for urban markets—a bulk occupation of the lowlands, long cleared of intensive forests or steppe vegetation. In Mediterranean Europe, rural life, based on horticulture and arboriculture rather than on large-scale cultivation, as well as on the rearing of sheep and goats and wheat cultivation, continues, little changed in many areas. For such deeply rooted fruit-bearing trees as the olive and vine, irrigation is made of slopes, broken, and terraced land. Farming also extends to semi-cultivated forms with respect to the subtropical coastal climate, sometimes supplemented by irrigation, remains.

ANIMAL LIFE. **MAY 25 2016**
Patterns of distribution. Wild animals as we know them—the earlier Pleistocene range and variety have been much reduced since man dispensed of wild nature provided. Wild fauna has been lost in regions since Upper Paleolithic times, when successive waves of nomadic human groups took over animal hunting, mainly aurochs and megatherium now extinct, and other mammals such survivors as bear, boar, bison, horse, and deer. Hares, swans, and geese, deer, fox, hedgehog, and marmot, trout, and pike were among animals that were, inevitably, a successful competitor for game. By prolonged effort, settlers won the land for crops and for domesticated animals, and they hunted animals especially for fur, as population increased in industrializing Europe, humans no less than rats destroyed, so changed originally, the wild vegetation cover and the animal life. Wild animals, and largely on human sufferance, animals more remarkable survived in association with contemporary vegetation zones.

The south. In the Iberian semi-tropical (caribou), both wild and domesticated, are well equipped to withstand the cold. These species’ predators are useful in finding food in brush ground. Their herds migrate southward in winter, where insects and other plants, as well as flesh, notably that of lemmings and voles. Dogs, too, are useful for traction but will less likely replace, which would provide meat mainly polar, wool, and dairy. The Arctic fox, bear, ermine, partridge, and the snowy owl may appear in the tundra, where the short summer is seabirds, river fish, and immigrants (swallows, and swallows) vitalize a harsh environment that is almost intolerable by the skins of mice.

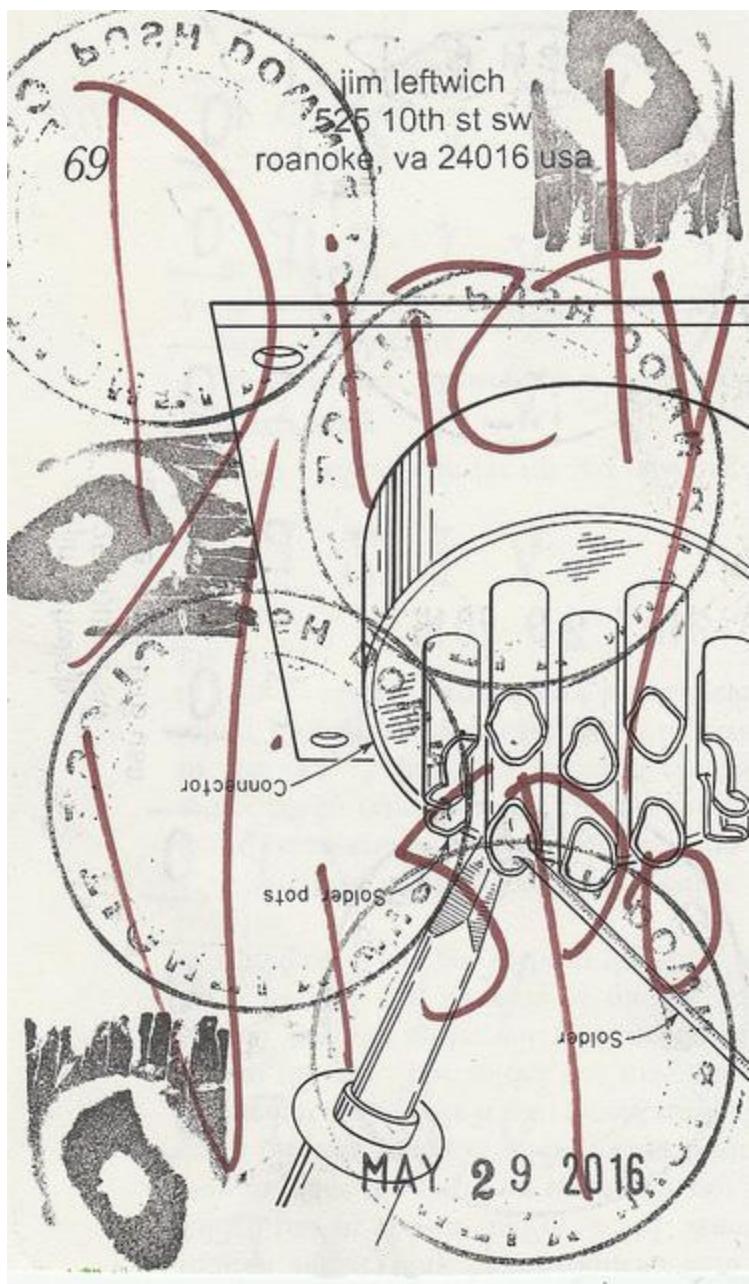
Boreal forests. **MAY 25 2016**
In the boreal forests the impact of animal and bird life, which has peaked in the course of historical times, is now greatly reduced. Among large survivors, ungulates are the elk (moose), reindeer, and roebuck, and, among big cat prey, the large brown bear. The lynx has been exterminated, but not the wolf, fox, marten, badger, polecat, and white weasel. The sable, much hunted for its fur, only just survives in the northeastern forests of

The thinning out of animal species in boreal forests

foresta-
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H Sound

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T G M U I K Q Y
Z H E S A H I D
K S F E H
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hip
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0-2 An assortment of power resistors (not

